Australian Bureau of Statistics

Measuring Australia's

Economy

1995

Contents

Time Series Data is available.

Extended **time series for most indicators in this publication are available from the Australian Bureau of Statistics (ABS) on floppy disk or in hardcopy form. Time series can also be 'mixed and matched' to create your own graphs and tables.**

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PREFACE

The 1995 edition of *Measuring Australia's Economy*, provides national statistics, definitions and references to further reading for 54 major economic indicators used by analysts and the media today. Most importantly, to make this information available to all readers, particularly those without a background in economics, it is written in non-technical, simple English.

Measuring Australia's Economy includes the latest economic indicators developed by the Australian Bureau of Statistics, such as the Composite Leading Indicator (page 20) along with indicators from other organisations and international comparisons for 11 key indicators.

Measuring Australia's Economy, now in its third edition, was developed in response to a need expressed by teachers, lecturers and other educators for a single, comprehensive source of economic indicator information. It has been designed as an information resource for students, analysts or anyone wishing to gain an understanding of economic indicators used to measure the performance of the Australian economy. It will enable the reader to understand exactly what an indicator is measuring, how this relates to economic activity, to look at data for an indicator over a period of time and to reference more detailed statistics or explanations if required. How to use this publication most effectively is described on the next page.

Measuring Australia's Economy is one of a range of Bureau products designed or suitable for students. Other major resources include STATPAKS consisting of products and topic guides relating to school curriculums in each State and Territory (ABS catalogue numbers 1330.1 — 1330.7). Other publications specifically written for the education sector include *Statistics — A Powerful Edge* (1331.0), *Surviving Statistics — A User's Guide to the Basics* (1332.0), *Striking a Balance!* (1314.0), *Women and Work* (6205.0) *and Australia — Working it Out!* (1332.2).

I trust that this publication will help the reader to understand how the Australian economy works and the changes going on within it.

RICHARD MADDEN
Acting Australian Statistician

Australian Bureau of Statistics
Canberra ACT
January 1995

HOW TO USE THIS PUBLICATION

Measuring Australia's Economy has been developed as a general reference publication and information resource for those wishing to gain an understanding of the major economic indicators used to measure the performance of the economy.

It is recommended that General Information on page (vii) and Chapter 1 be read before looking at the statistics.

Economic Indicators

The publication contains economic indicators along with additional information provided to assist the reader's understanding and interpretation of the statistics presented. The economic indicators, consisting of data and explanatory notes for each indicator, are presented in Chapter 2. They have been grouped by activity for ease of interpretation. International comparisons have been presented for some key indicators and you will find them in Chapter 3. Use the index at the rear of this publication to assist in locating the information required.

The additional information that describes presentation conventions and the statistical methods and concepts used to collect, compile and present the data, are presented in Chapter 4, *Statistics: Concepts, Sources, Methods and Usage*. This chapter also contains further references to more detailed explanations that may be required.

Updated Data Available

Measuring Australia's Economy is an annual publication. Should you wish to access the very latest data or further details of concepts, sources and methods, the source publications are included in the footnotes of each chart and table for reference. Alternatively, publications issued regularly also contain the latest statistics. In particular *Australian National Accounts: National Income, Expenditure and Product* (5206.0) and *Balance of Payments, Australia* (5302.0) would be useful publications to reference. For general reference, use the ABS *Catalogue of Publications and Products* (1101.0) to locate the information you require.

The ABS operates a Library Extension Program which targets research libraries (national, State, tertiary and Parliamentary libraries), Public libraries, special libraries (government and private sector). Libraries that participate in the extension program hold substantial collections of ABS material. The ABS publications mentioned throughout this publication, including those above, could be available in your nearest TAFE or university library.

GENERAL INFORMATION

This Publication

General inquiries concerning this publication should be addressed to the Manager, Client Support, Brisbane, on (07) 222 6155.

Comments on ways to improve this publication are welcome and should be directed to The Editor, *Measuring Australia's Economy* (1360.0), SSACS Branch, GPO Box 9817, Brisbane Qld 4001.

Chart and Table Contents

The statistics presented are the latest available at *October 1994*.

The statistics are generally presented in the charts as time series for the last 10 years of monthly or quarterly data.

The tables generally present the last 6 years of annual data along with the latest 7 quarters or 15 months of sub-annual data.

Data Sources

The tables contain mainly ABS data, although data from non-ABS sources are also included. For ABS data, the name of the source publication and its catalogue number are included in the footnotes of the charts and tables. If the data are from other sources, the source organisation's name is included in the footnotes.

Seasonally Adjusted and Trend Estimates

Data series in this publication include original, seasonally adjusted and trend series. Seasonally adjusted and trend series are clearly labelled. All other series are original series. Care should be taken in interpreting data for the most recent months and quarters. Some of the original and all of the seasonally adjusted series and trend are subject to revision. The ABS is increasingly placing emphasis on trend series, which are seasonally adjusted data, smoothed to diminish the impact of irregular components in the series.

It is not uncommon for movements in the original time series data to differ from those in seasonally adjusted and trend time series. Movements in a time series of original data may reflect several factors, including:

- longer-term changes in the item being measured (i.e. trend movements);
- short-term irregular changes;
- regular seasonal influences;
- normal 'trading', 'working' or 'pay' day patterns; and
- systematic holiday effects.

Seasonal adjustment and trend estimates help the user identify the effect of these influences on the time series. Seasonal adjustment removes the effect of the last three listed influences from the data, leaving only the trend and short-term irregular movements. Trend estimates are then obtained by removing the effects of the short-term irregularities.

Constant Price Estimates

Constant price estimates in this publication refer to estimates in 1989–90 dollar terms and measure values expressed at the average prices that prevailed that year. Period to period movements in constant price estimates provide what are often called 'changes in real terms'.

Explanatory Notes

ABS publications generally contain Explanatory Notes which describe the collection methodology and data items contained therein. Because *Measuring Australia's Economy* contains statistics from numerous sources, collection methodologies and data item descriptions have not been included. Readers are directed to the Explanatory Notes contained in the appropriate ABS publications for such descriptions. Explanatory Notes in *Measuring Australia's Economy* describe each economic indicator.

Further Reading

Further reading references for each indicator are generally ABS publications. The ABS uses a catalogue numbering system to describe its publications and products. The catalogue number appears in brackets after each publication, for example, *Balance of Payments, Australia* (5303.0). A description of the catalogue numbering system can be found in the *Catalogue of Publications and Products* (1101.0). The origins of publications not from the ABS are also indicated.

Symbols and Other Usages

In all tables the following symbols mean:

n.a.	not available
n.y.a.	not yet available
p	preliminary
. .	not applicable
—	nil or rounded to zero

Yearly periods shown as, e.g. 1993–94, refer to the fiscal year ended 30 June.
Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.

Chapter

CHAPTER 1
MEASURING ECONOMIC ACTIVITY

The Australian Bureau of Statistics (ABS) constitutes the central statistical authority for the Australian Government and, by arrangements with the Governments of the States, provides statistical services for those Governments. It is the central agency which collects, compiles, analyses and distributes statistics and related information. The ABS has a responsibility to provide information which supports decision making and informs the community generally.

Economic Statistics

A large amount of the information collected and published by the ABS records economic activity. This information is collected mainly by surveys and censuses, while some is a by-product of administrative activities, for instance, information about motor vehicles registered is regularly acquired by the ABS from State motor vehicle registration authorities.

The information collected from surveys, censuses and as administrative by-product is put together to form separate measures of activity in the economy. For instance, the turnover of retailers is compiled from a survey conducted by the ABS and the number of people employed is compiled from the ABS labour force survey. These measures are also referred to as *economic indicators*, which can be thought of as economic variables which change in a predictable way in relation to overall economic activity. Economic analysts use indicators along with other information to help explain why things happen as they do in the economy and then use this knowledge to predict future events.

National Accounts

With separate indicators, particular aspects of economic activity can be monitored. Motor vehicle registrations and the turnover of retailers have already been mentioned. Some other separate measures are the profits made by companies, the amount of building activity and the output of manufacturers.

Another important use of this information is as the building blocks of a set of accounts for Australia, called the national accounts. Just as a set of accounts for a business consolidate a lot of information about the business and present it in a set format, national accounts consolidate a range of statistics, from those involving individuals to those involving the whole nation, into a consistent format which describes the overall economic position of the nation. The accounts also provide details of the contributions of different types of economic activity to the total within a particular period. For example, we can see from the national accounts how much of our national income is derived from exports, or how much of the national production is contributed by the manufacturing sector.

The summary measure of the nation's economic position provided in the national accounts is Gross Domestic Product or GDP. GDP is one of the most important economic indicators. It is defined as the value of goods and services produced within Australia's territory, less the value of goods and services used up in the production process.

This publication provides descriptions and examples of about fifty key economic indicators, some of which form part of the national accounts. Descriptions of basic concepts are included, followed by a comprehensive index. The section *How to Use This Publication* on page (vi) contains a description of the contents and suggestions on how to best use the publication.

Chapter

CHAPTER 2
ECONOMIC INDICATORS

It is possible to get a picture of the Australian economy by reading the newspaper, journals, economic texts and government publications. Commentators who contribute to these publications analyse the Australian economy by observing the major economic indicators in the context of how they view the Australian political and social environment.

Analysis of the economy should be based on the major economic indicators. A combination of a knowledge of economic indicators and an understanding of the social and political environment will help to assess why the economy has changed over time.

Whenever the economy is analysed, arguments should be backed up using economic indicators data. Also, when arguments that other commentators put forward are read, care should be taken to ensure they are supported by economic data.

Economic indicators in this publication can be used to see how the economy has changed over the last 10 years.

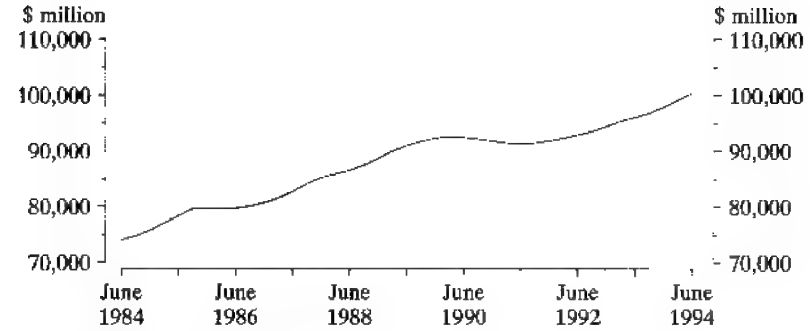
Section 2.1
Summary Measures of Economic Activity

2.1.1 Gross Domestic Product

Comment

Gross domestic product, GDP(A) trend at constant prices has recorded continued growth from September quarter 1991. This followed a sustained decline in economic activity (a recession) between March quarter 1990 and June quarter 1991, with five quarterly decreases in GDP(A), lasting longer than the 1982–1983 recession. The Australian economy displayed growth through most of mid-to-late 1980's with the exception of March quarter 1986 which recorded a slight decrease.

GROSS DOMESTIC PRODUCT, GDP(A) AT AVERAGE 1989-90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

MEASURES OF GROSS PRODUCT AT AVERAGE 1989-90 PRICES
($ million)

Period	*GDP(I) income based*	*GDP(E) expenditure based*	*GDP(P) production based*	*GDP(A) average*
		ANNUAL		
1988–89	359,715	354,842	357,235	357,264
1989–90	370,287	366,514	370,287	369,029
1990–91	367,619	365,989	366,451	366,686
1991–92	368,749	371,696	365,629	368,691
1992–93	380,683	381,752	376,930	379,788
1993–94	396,858	394,736	392,371	394,655
		QUARTERLY — TREND		
1992–93—				
December	94,508	95,039	93,749	94,432
March	95,636	95,678	94,639	95,318
June	96,667	96,131	95,307	96,035
1993–94—				
September	97,509	96,708	96,112	96,776
December	98,335	97,851	97,388	97,858
March	99,318	99,285	98,935	99,179
June	100,361	100,548	100,454	100,454

Source: ABS, *Australian National Accounts: National Income, Expenditure and Product* (5206.0).

Explanatory Notes

Gross domestic product (GDP) is an aggregate measure of the value of economic production in Australia in a given period.

Three independent measures of GDP are produced each quarter. They are the sum of goods and services produced at each stage of production less the costs of production, **GDP(P)**; the sum of incomes generated by production, **GDP(I)**; and the sum of final expenditure on goods and services produced, plus exports minus imports, **GDP(E)**. A fourth measure of GDP, calculated as the average of the above three, is referred to as **GDP(A)**.

Analysis has shown that *constant price* GDP(A) has provided the most satisfactory indicator of short-term seasonally adjusted or trend growth in GDP.

The preferred *current price* measure of GDP is GDP(I). It is the overall measure which is consistent with subsidiary measures, such as national income and data in the other consolidated tables (for example, the national income and outlay account). GDP(I) also provides the base year benchmarks for the constant price estimates of GDP(P). Before the introduction of GDP(A) in 1990, constant price GDP(I) had traditionally been the most prominent and commonly-used measure of economic growth in Australia.

Further Reading

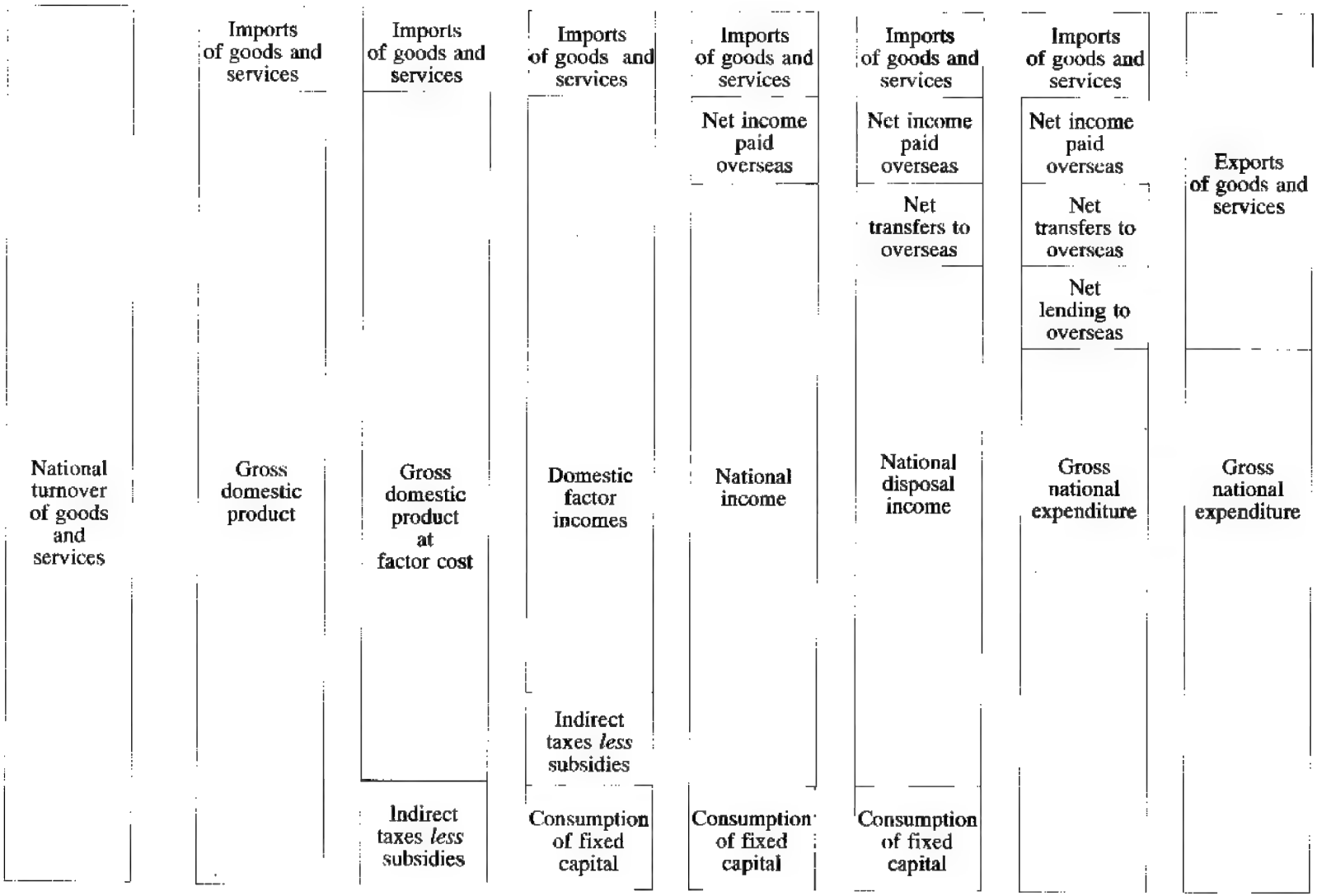
- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data back to September quarter 1984 for each of the 4 measures of GDP. See the Feature Article in the June Quarter 1990 issue for information on the relationship between the three GDP measures.

- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

- ☐ *Australian Economic Indicators* (1350.0)
  See feature article in the May 1994 issue, '"Real" Estimates in the National Accounts'.

NATIONAL ACCOUNTS
RELATIONSHIP OF MAIN AGGREGATES



Explanatory Notes

The essential function of the national accounts is to provide a systematic summary of national economic activity. The structure of the national income and expenditure accounts provides an economically meaningful aggregation of the wide range of diverse transactions occurring in the economy and the various entities (transactors) involved in those transactions.

The basic structure of the national accounts is determined by the classification of transactors into institutional sectors and the classification of transactions firstly by economic type and secondly grouped to form accounts. The four domestic institutional sectors grouped according to their roles, (with the emphasis being on the differences in their financial behaviour in the economy) are: corporate trading enterprises; financial enterprises; households; and general government.

The types of accounts reflect the major economic processes occurring in the economy, namely production, the distribution of incomes, consumption, saving and investment. Accordingly, they reflect the key economic flows of the Keynesian system. The national income and expenditure accounts are composed of three major types of accounts:

- production accounts
- income and outlay accounts; and
- capital accounts.

A fourth account, the overseas transactions account, records transactions between the domestic economy and the rest of the world.

Each of these accounts is produced for the nation as a whole and these four accounts form the consolidated summary accounts. An important feature of the accounts is that they are a double entry system, and therefore are fully balanced. Every entry has a counterpart entry, i.e. every outgoing reappears elsewhere as an incoming, reflecting the circularity of the economic process. However, in order to show the derivation of important aggregates, a few debit entries are shown as deductions on the credit side of the accounts.

The figure on the facing page shows how the various national accounting aggregates are related to each other. National turnover can be viewed as the *total supply of goods and services* to the market, free of duplication, in a given period. In other words, it is the total supply available in Australia to final buyers. Supply is sourced from both domestic production and imports.

The last block views national turnover as the sum of all *final expenditures* on goods and services in the same given period. These final expenditures are defined to include increases in stocks and exports, which are considered to be final expenditures from the point of view of the domestic economy.

The supply and expenditure views do not quite represent the same physical goods because goods produced in the current period may pass through stock holdings before being included in consumer and capital expenditures or in exports in subsequent periods. On the other hand, the views do represent the same services, because services are supplied and used simultaneously.

Further Reading

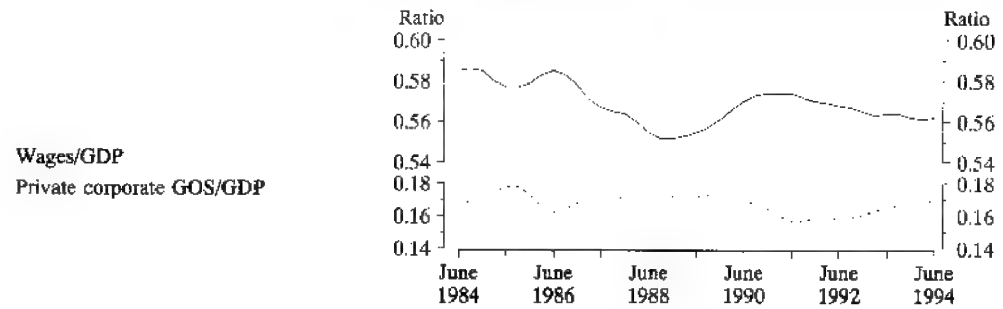
☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)

2.1.3 National Accounts
Domestic Production Account

Comment

Costs of production, or the ratio of wages, salaries and supplements to GDP at factor cost, decreased from June quarter 1986 to September quarter 1988 and then increased to reach 0.57 in September quarter 1990. Over the same period, income of enterprises from production, or the ratio of gross operating surplus to GDP at factor cost, increased initially then levelled for ten consecutive quarters before falling to 0.15 in June quarter 1991. Since September quarter 1990 the proportion of wages, salaries and supplements to GDP has decreased slightly, reaching 0.56 in June quarter 1994. Gross operating surplus to GDP has continued to increase from June quarter 1991 to June quarter 1994.

PROPORTION OF WAGES, SALARIES AND SUPPLEMENTS TO GDP AT FACTOR COST, AND PROPORTION OF PRIVATE CORPORATE GROSS OPERATING SURPLUS (GOS) TO GDP AT FACTOR COST, TREND



Source: ABS 5206.0, Quarterly data

DOMESTIC PRODUCTION ACCOUNT (a)
($ million)

	1988–89	*1989–90*	*1990–91*	*1991–92*	*1992–93*	*1993–94*
Final consumption expenditure	252,368	279,456	297,769	314,059	327,665	341,400
Gross fixed capital expenditure						
Private	67,207	67,813	60,849	56,090	60,320	64,872
Public enterprises & general government	17,920	21,663	20,802	20,586	19,246	18,023
Increase in stocks	3,799	4,469	–1,782	–1,905	–436	881
Gross national expenditure	341,294	373,401	377,638	388,830	406,795	425,176
Net exports	–6,060	–6,888	–63	1,576	–1,819	–1,897
Gross domestic product (GDP(E))	**335,234**	**366,513**	**377,575**	**390,406**	**404,976**	**423,279**
Statistical discrepancy	4,571	3,773	1,678	–3,081	–1,124	2,287
Gross domestic product (GDP(I))	**339,805**	**370,286**	**379,253**	**387,325**	**403,852**	**425,566**
Wages, salaries and supplements	164,991	183,623	191,379	195,475	202,355	211,298
Gross operating surplus	133,538	142,197	143,131	147,414	155,885	163,676
Gross domestic product at factor cost	298,529	325,820	334,510	342,889	358,240	374,974
Indirect taxes less subsidies	41,276	44,466	44,743	44,436	45,612	50,592
Gross domestic product (GDP(I))	**339,805**	**370,286**	**379,253**	**387,325**	**403,852**	**425,566**

(a) Data are available and published quarterly.
Source: ABS, *Australian National Accounts: National Income, Expenditure and Product* (5206.0).

Explanatory Notes

The domestic production account is a consolidated summary account of all the production activity which takes place in Australia. The account records the expenses incurred in production and the receipts from sales of final goods and services.

On the credit side the domestic production account records receipts from sales of goods and services (including goods produced for own use) to final domestic consumers, increases in stocks and exports minus imports. The aggregation of the receipts side is referred to as expenditure on GDP, that is GDP(E).

On the debit side of the production account are recorded the costs of production including factor incomes, i.e. wages, salaries and supplements, gross operating surplus (the income of enterprises from production) and net indirect taxes paid to government. The aggregation of the payments side is referred to as GDP(I).

Conceptually, GDP(I) is equivalent to GDP(E). However, in practice, the statistical discrepancy, reflecting net errors and omissions, is the difference between these two totals. When compiling the national income and expenditure accounts it is necessary to show the statistical discrepancy as a contra entry in one of the other summary accounts. It has been included in the capital account since the Australian national accounts were first compiled in their current form.

The domestic production account is analogous to accounts used in business accounting and is, in effect, a consolidation of the trading accounts of individual enterprises from all sectors.

Further Reading

- *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data back to September quarter 1984 for the domestic production account in original, seasonally adjusted and trend series, and in current and constant prices.

- *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

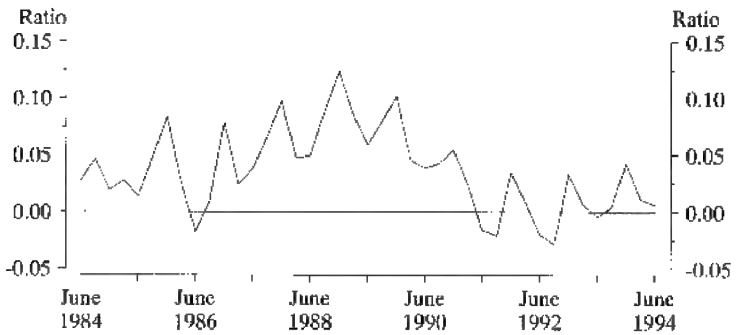
- *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

2.1.4 National Accounts
Income and Outlay Account

Comment

The ratio of national saving to national disposable income in original terms, fluctuates from quarter to quarter with peaks recorded in every December quarter between 1984 and 1994. The ratio peaked in December quarter 1988 and then decreased to a low in September quarter 1992 before generally increasing again.

PROPORTION OF NATIONAL SAVING TO NATIONAL DISPOSABLE INCOME



Source: ABS 5206.0, Quarterly data

NATIONAL INCOME AND OUTLAY ACCOUNT
($ million)

	1988–89	*1989–90*	*1990–91*	*1991–92*	*1992–93*	*1993–94*
Wages, salaries and supplements	164,991	183,623	191,379	195,475	202,355	211,298
Net operating surplus	82,259	86,339	84,824	87,488	93,315	99,018
Domestic factor incomes	247,250	269,962	276,203	282,963	295,670	310,316
less Net income paid overseas (a)	13,655	17,512	17,694	15,591	13,858	14,414
Indirect taxes	45,808	49,056	50,476	50,357	52,142	56,904
less Subsidies	4,532	4,590	5,733	5,921	6,530	6,312
National income	274,871	296,916	303,252	311,808	327,424	346,494
less Net unrequited transfers to overseas	–2,208	–2,329	–2,428	–2,241	–727	–275
National disposable income	277,079	299,245	305,680	314,049	328,151	346,769
Final consumption expenditure —						
Private	195,548	217,817	231,075	242,559	252,890	264,235
Government	56,820	61,639	66,694	71,500	74,775	77,165
Saving	24,711	19,789	7,911	–10	487	5,369
Disposal of income	277,079	299,245	305,680	314,049	328,151	346,769

(a) Includes property income, labour income and extraordinary insurance claims from overseas.
Source: ABS, *Australian National Accounts: National Income, Expenditure and Product* (5206.0).

Explanatory Notes

The national income and outlay account is one consolidated national account which describes the distribution of incomes in the economy. The account shows how much of the national income is spent on final consumption. That part of income which is not spent in this way is saving.

The national income and outlay account records (on the income side) wages, salaries and supplements, net operating surplus and indirect taxes less subsidies (all from the domestic production account). From this income are deducted net payments of income and miscellaneous transfers to overseas to yield national disposable income.

The outlay or disbursements side of the account shows this disposable income as being used for final consumption expenditure with the balance being the nation's saving – a source of finance for gross capital formation.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data for the last 9 quarters for the national income and outlay accounts including quarterly national income and outlay accounts for households and general government.

- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

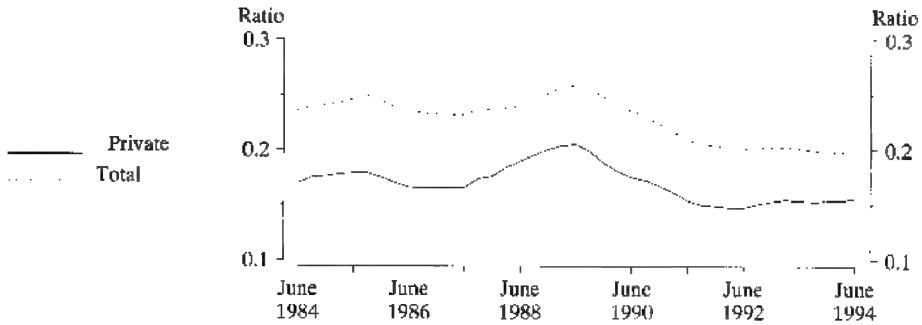
- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

2.1.5 National Accounts Capital Account

Comment

The proportion of private gross fixed capital expenditure to GDP(E) increased from 0.15 in June 1983 to a peak of 0.21 in June 1989 and has since stabilised to approximately 0.15. From March 1985 to September 1987 the proportion of private gross fixed capital expenditure to GDP(E) remained stable at 0.17. The proportion of total gross fixed capital expenditure to GDP(E) has also fallen markedly in recent years, largely because of the fall in the private sector.

PROPORTION OF PRIVATE AND TOTAL FIXED CAPITAL EXPENDITURE TO GDP(E) AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

NATIONAL CAPITAL ACCOUNT
($ million)

	1988–89	*1989–90*	*1990–91*	*1991–92*	*1992–93*	*1993–94*
Consumption of fixed capital	51,279	55,858	58,307	59,926	62,570	64,658
Other saving (a)	2,079	–4,066	–8,533	–3,264	1,999	5,692
Household saving	14,790	16,387	14,624	14,552	14,421	14,878
General government surplus on current transactions	8,034	7,844	1,820	–11,298	–15,934	–15,201
Finance of gross accumulation	*76,182*	*76,023*	*66,218*	*59,916*	*63,056*	*70,027*
Gross fixed capital expenditure —						
Private —						
Dwellings	17,591	18,546	17,109	16,928	19,171	21,261
Non–dwelling construction	14,481	16,624	14,020	11,177	10,064	10,348
Equipment	28,029	27,344	24,952	22,801	25,814	27,377
Real estate transfer expenses	7,106	5,299	4,768	5,184	5,271	5,886
Public enterprises	10,348	13,016	12,026	11,757	10,131	9,176
General government	7,572	8,647	8,776	8,829	9,115	8,847
Total	*85,127*	*89,476*	*81,651*	*76,676*	*79,566*	*82,895*
Increase in stocks	3,799	4,469	–1,782	–1,905	–436	881
Statistical discrepancy	4,571	3,773	1,678	–3,081	–1,124	2,287
Net lending to overseas	–17,507	–22,071	–15,329	–11,774	–14,949	–16,036
Gross accumulation	76,182	76,023	66,218	59,916	63,056	70,027

(a) Increase in income tax provisions, undistributed income and extraordinary insurance claims paid.
Source: ABS, *Australian National Accounts: National Income, Expenditure and Product* (5206.0).

Explanatory Notes

The national capital account shows how the saving from the national income and outlay account is used to finance gross fixed capital expenditure. Essentially therefore, this account shows the saving and investment flows taking place in the economy.

If, as is currently the case in Australia, the nation's saving is not sufficient to pay for all the capital equipment needed for Australian production, the shortfall must be borrowed from overseas. The amount borrowed from overseas is shown in the national capital account as a negative entry for *net lending to overseas.*

The equality of investment and saving follows from the fact that saving is that part of the national income which is not spent on consumption while investment is that part of the domestic product which is not consumed.

The national capital account shows, on the receipts side, consumption of fixed capital transferred from the domestic production account and saving transferred from the national income and outlay account.

On the payments side are purchases by all sectors of new buildings, structures and equipment, the increase in stocks of all sectors and a balance described as *net lending to overseas.*

In principle, the sum of net lending for all domestic sectors is equal to the nation's net lending to overseas. However, in practice, net lending for each sector is derived as a balancing item and therefore includes each sector's share of the statistical discrepancy, which represents net errors and omissions in the accounts

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data for the last 9 quarters for the national capital account as well as other national accounting aggregates.

- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

- ☐ *Australian National Accounts: Financial Accounts* (5232.0)
  Contains information on the level (stock) of financial assets and liabilities of each sector of the economy and transactions (flow of funds) between the sectors.

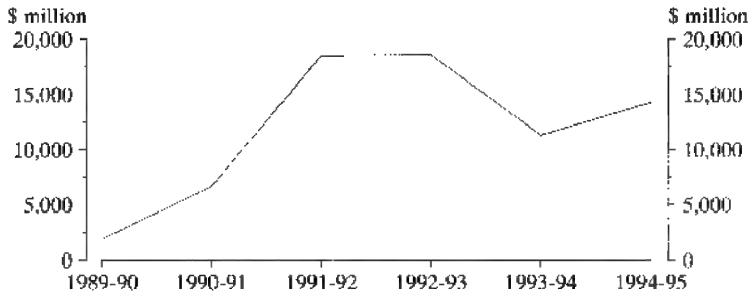
- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

2.1.6 Government Financial Estimates

Comment

The net financing requirement for all levels of government combined is expected to rise from $11,309m in 1993–94 to $14,252m in 1994–95. Total government outlays during the 1989–90 to 1994–95 period have been consistently higher than total government revenue thus continuing the deficit position of the net financing requirement.

NET FINANCING REQUIREMENT (a)
COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED



(a) Net financing requirement comprises financing less increase in provisions less net advances received.
Source: ABS 5501.0, Annual data

ECONOMIC TRANSACTIONS OF
COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED
($ million)

Period	*Total current outlays*	*Total capital outlays*	*Total outlays*	*Total revenue*	*Total financing (a)*	*Net financing requirement (b)*
			ANNUAL			
1989–90	116,916	24,413	141,328	134,182	7,146	1,887
1990–91	128,588	22,179	150,768	139,512	11,255	6,676
1991–92	137,415	22,659	160,073	135,192	24,882	18,533
1992–93	144,722	18,657	163,378	139,111	24,267	18,570
1993–94	152,371	13,153	165,523	148,544	16,979	11,309
1994–95 (c)	161,215	18,411	179,626	159,025	20,601	14,252

(a) Financing is the difference between total outlays and revenue and grants received. (b) Net financing requirement comprises financing less increase in provisions (which equals deficit or surplus) less net advances received. (c) Forward estimate.
Source: ABS, *Government Financial Estimates, Australia* (5501.0).

Explanatory Notes

Government financial estimates provide forecasts of outlays and revenue for the current financial year (the budget year) and estimates of actual expenditure and revenue for the past 5 years. The estimates cover both government organisations mainly funded from taxation (called general government) and government enterprises providing goods and services for the market (public trading enterprises).

The estimates are compiled from Commonwealth and State government budgets which are presented usually in August and September each year, and from estimates supplied by individual authorities not funded directly from the budget (e.g. electricity authorities, public transport authorities, statutory authorities and local government authorities).

Government finance statistics can be used to monitor fiscal policy. When government increases its spending, for example when it increases pensions and benefits paid to households, there is a tendency for aggregate demand to rise. A similar effect can be obtained by reducing taxation so that more money remains in the hands of private consumers. Conversely, government can reduce expenditure or increase taxes in an attempt to reduce demand.

The difference between government outlays and revenue is measured by the Net Financing Requirement (NFR) which affects government debt. A positive NFR means the government must borrow money to finance its activities. This increases debt. If revenue exceeds outlays, the NFR is negative and the government can use the surplus to reduce debt.

The actual size of the NFR often differs from the initial forecast. Any changes in the state of the economy affect government outlays and revenue. During a fall in economic activity, tax revenue falls while outlays on welfare increase. As the economy picks up, outlays on welfare fall and tax revenue rises. This process is most marked at the Commonwealth government level.

Further Reading

- ☐ *Government Financial Estimates, Australia* (5501.0)
  Contains outlays, revenue and financing transactions for all levels of government covering the forward (or budget) year and the previous 5 years.

- ☐ *Public Sector Financial Assets and Liabilities, Australia* (5513.0)
  Contains annual statistics on the financial assets and liabilities of the Australian non-financial public sector.

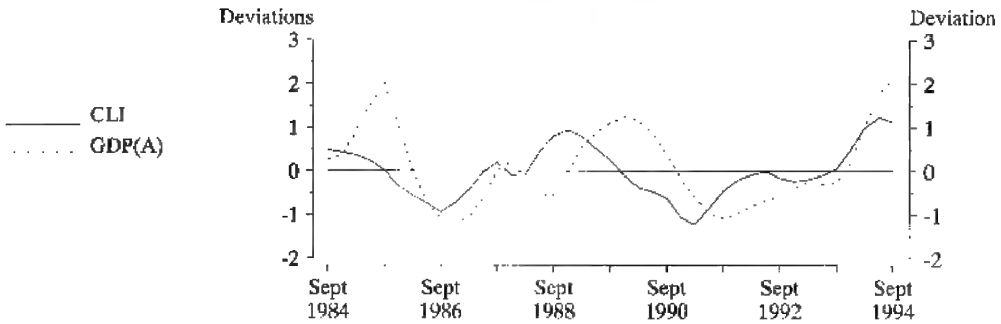
- ☐ *Government Finance Statistics, Australia* (5512.0)
  Provides annual details of the consolidated financial transactions of the non-financial public sector for all levels of government.

2.1.7 Composite Leading Indicator

Comment

On average during the 1970's and 1980's, the Composite Leading Indicator (CLI) led turning points in GDP(A) growth cycle by around two quarters, but the lead time for peaks and troughs varied considerably. The figure for September quarter 1994 CLI suggests that the quarterly trend growth rate of GDP (A) (1.2% in September quarter 1994) is likely to begin shifting toward its historical long-term trend quarterly growth rate of 0.9% during 1995.

CLI AND GDP (A)
DEVIATIONS FROM HISTORICAL LONG-TERM TREND IN GDP(A)



Source: ABS 1350.0, Quarterly data

CLI AND GDP(A)
DEVIATIONS FROM HISTORICAL LONG-TERM TREND IN GDP(A)

Period	*CLI deviation from long–term trend*	*Change from previous quarter*	*GDP(A) deviation from long–term trend*	*Change from previous quarter*
		QUARTERLY		
1992–93—				
March	–0.19	0.12	–0.23	0.15
June	–0.10	0.09	–0.29	–0.06
1993–94—				
September	0.07	0.17	–0.24	0.05
December	0.50	0.43	0.20	0.44
March	1.01	0.51	1.03	0.83
June	1.24	0.23	1.80	0.77
1994–95				
September	1.12	–0.12	2.11	0.31

Source: ABS, *Australian Economic Indicators* (1350.0).

Explanatory Notes

The Australian Bureau of Statistics has developed an experimental Composite Leading Indicator (CLI) which summarises the early signals contained in a selection of economic indicators. The CLI is designed to help in the detection of turning points between successive expansions and slowdowns in economic activity.

The CLI is a single time series produced by aggregating economic indicators which give a balanced coverage of several aspects of economic activity. These aspects are monetary policy (real interest rates), a measure of terms of trade (ratio of commodity prices to import prices), external demand (US GDP), pressures on production capacity (job vacancies), internal demand (housing finance), market confidence (the All Industrials Index) and entrepreneurs' expectations.

The expansion and contraction phases identified in a business cycle are periods of rise and fall in economic activity relative to the historical long-term trend of constant price GDP(A). Constant price GDP(A) is the reference measure of economic activity used by most decision makers in Australia.

The CLI is expressed in terms of deviation from the long-term trend in GDP(A). It is designed so that the direction of its growth indicates the likelihood of an expansion or a slowdown relative to the historical long-term trend in GDP(A) in the next 1 to 6 quarters. The mean lead time of the CLI is about 2 quarters.

The primary use of the CLI is for the detection of turning points in the business cycle, not in forecasting the level of any measure of economic activity.

The ABS is also developing a survey of business expectations to give a short and medium term, quantitative measure of the expected change of a number of business performance indicators. Experimental results are available in *Australian Business Expectations* (5250.0), described in the Further Reading section below.

Further Reading

- ☐ Information Paper: *An Experimental Composite Leading Indicator of Australian Economic Activity* (1347.0)
  This information paper describes the nature and construction of a new experimental leading indicator of Australian economic activity.

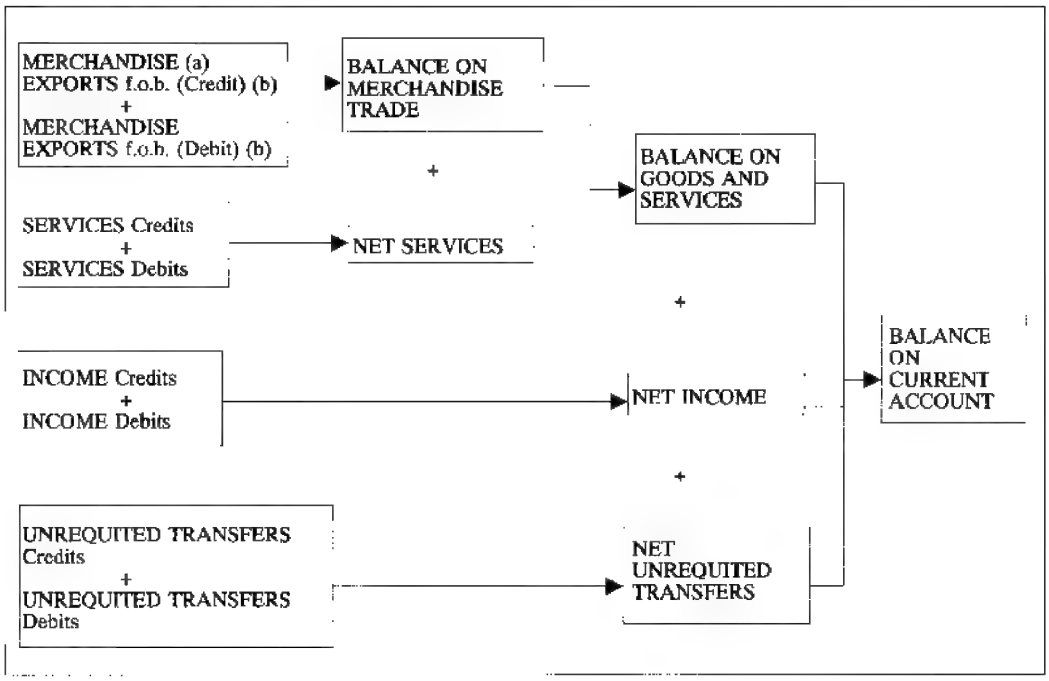
- ☐ *Australian Economic Indicators* (1350.0)
  The Composite Leading Indicator is released every quarter and is published in Australian Economic Indicators.

- ☐ *Australian Business Expectations* (5250.0)
  Contains estimates of future economic activity based on the business expectations of senior executives, managers and proprietors of businesses operating in Australia. Estimates, by industry, of the expected change for 1 quarter and 4 quarters are presented for a range of performance indicators covering trading performance, investment, employment, operating expenses and international trade.

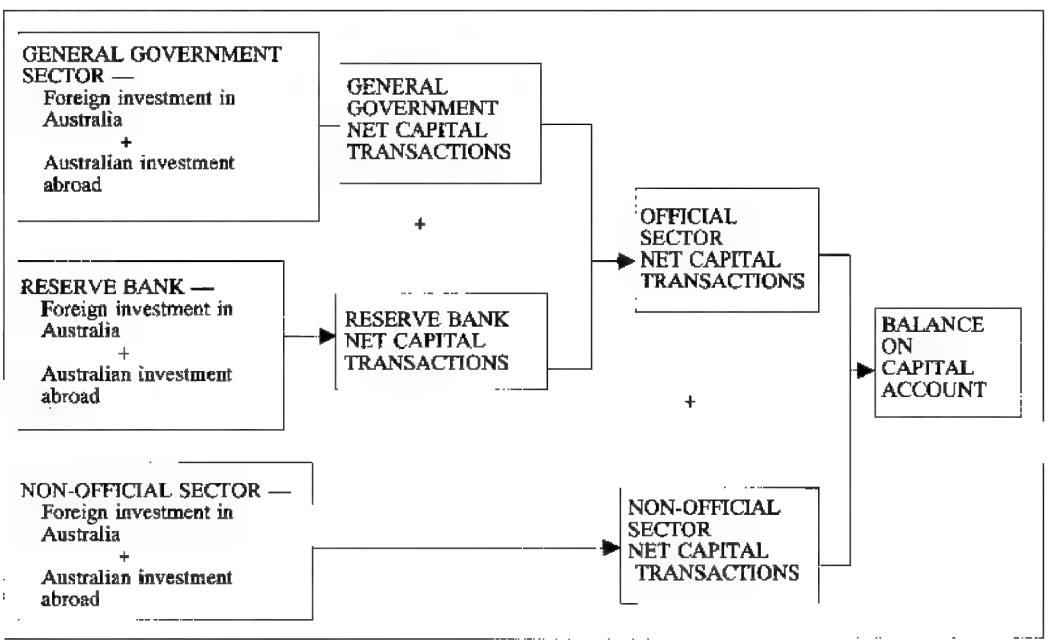
Section 2.2
International Accounts and Trade

2.2.1 Balance of Payments

CURRENT ACCOUNT



CAPITAL ACCOUNT



(a) Balance of Payments basis. (b) Merchandise is valued at the point of free on board (f.o.b.) at the customs frontier of the exporting country.

Explanatory Notes

Two broad accounts make up the balance of payments, namely the current account and the capital account. Despite its name, the balance of payments is a record of Australia's economic *transactions* with the rest of the world, many of which do not involve simultaneous payment (such as credit sales) and some of which involve no payment at all (such as goods provided under foreign aid programs). All these transactions, which usually involve dealings between an Australian resident and a non-resident, are entered in a set of double entry accounts which make up the balance of payments. It is the use of the double entry system that enables *balances* to be derived, but the balance of payments cannot be summarised in just a single balance.

The *current account* comprises transactions in goods, services, income and unrequited transfers. Unrequited transfers are offset entries to transactions where ownership of an item changes without payment, or expectation of payment. For example, an immigrant might bring in foreign exchange; the offsetting entry is an unrequited transfer.

The *capital account* comprises transactions in Australia's foreign financial assets and liabilities, such as foreign borrowing and lending by Australian residents, equity investments and purchases and sales of official reserve assets.

In principle, the deficit (or surplus) on the current account should be matched by a surplus (or deficit) on the capital account. In practice, this is not the case. The balances on the capital account and the current account are reconciled by the *balancing item*. This is the sum of net errors (transactions not measured accurately) and net omissions (transactions not measured at all).

Further Reading

- ☐ *Balance of Payments, Australia* (5301.0)
  Contains monthly data on imports of goods and services, including trend and seasonally adjusted series.

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted and constant price estimates of the current account.

- ☐ *Balance of Payments, Australia* (5303.0)
  Contains detailed annual balance of payments tables on current and capital account transactions for the latest 6 years. See the feature articles in the 1992–93 publication for balance of payments ratios and for international comparisons of balance of payments statistics.

- ☐ *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0)
  Provides a comprehensive description of the concepts and structure of the Australian balance of payments and of the data sources and methods used to compile the statistics contained in Australian balance of payments publications.

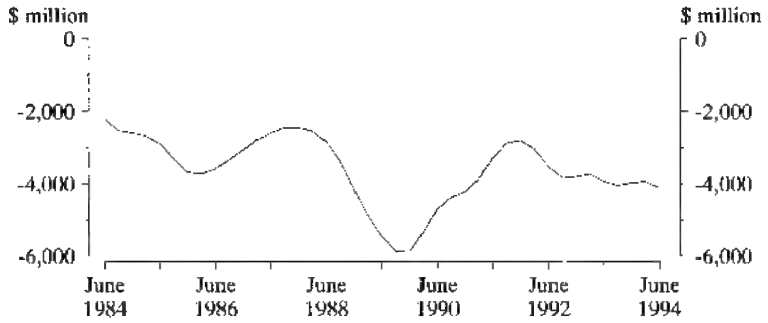
- ☐ *A Guide to Balance of Payments Statistics* (5362.0)
  Contains general concepts and practices involved in the Australian Balance of Payments. Provides a basic explanation of data sources, methods and uses of balance of payments statistics.

2.2.2 Balance of Payments Current Account

Comment

In trend estimate terms, Australia's balance on current account declined to a low of –$5,909m in December quarter 1989. During the 8 quarters following this, the balance improved, reaching –$2,807m in December quarter 1991. More recently, the balance on current account has been slowly deteriorating to –$4,111m in June quarter 1994.

BALANCE ON CURRENT ACCOUNT, TREND



Source: ABS 5302.0, Quarterly data

BALANCE OF PAYMENTS, CURRENT ACCOUNT
($ million)

Period	*Balance on current account*
ANNUAL	
1988–89	–17,473
1989–90	–21,833
1990–91	–15,801
1991–92	–11,971
1992–93	–15,337
1993–94	–16,436
QUARTERLY — TREND	
1992–93—	
December	–3,817
March	–3,737
June	–3,929
1993–94—	
September	–4,046
December	–3,977
March	–3,945
June	–4,111

Source: ABS, Balance of Payments, Australia (5302.0).

Explanatory Notes

The balance on current account is the sum of the balances on merchandise trade, services trade, income and unrequited transfers. The balances are derived by calculating the difference of credit entries, which are shown without sign, and debit entries, which have a negative sign. If the sum of the balances is negative, a nation has a current account deficit, while if the figure is positive, a nation has a current account surplus.

The balance on current account consists of:

Balance on goods and services: the difference between the total export value and the total import value of goods and services. It should be noted that within the balance on goods and services there is a net services balance and a merchandise trade balance which provides an analytically useful division between services and goods;

Net income: the difference between the value of income, such as dividends and interest earned by residents from non-residents (credits) and that payable by residents to non-residents;

Net unrequited transfers: the difference between unrequited transfer credits and debits. An unrequited transfer is needed when real or financial resources are provided without something of economic value being received in return. For example, Australia's foreign aid abroad requires a debit entry while an immigrant who brings foreign exchange to Australia adds a credit entry to unrequited transfers.

Australia has had a current account deficit since the mid-1970s. This indicates that the nation as a whole has been consuming and investing more than the available national income and savings levels. To fund this shortfall, Australia has had to acquire finance from non-residents. These capital inflows are measured in the capital account of the balance of payments. The net capital inflow (inflows less outflows) in a period is in principle equal and offsetting to the deficit on the current account of the balance of payments in that period.

The continued capital account surpluses have contributed to Australia's net foreign debt. The economic significance of this debt is hotly debated but, interestingly, the interest repayments on it are the major cause of Australia's large net income deficits which, in turn, represent a substantial component of Australia's current account deficits.

Further Reading

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted and constant price estimates of the current account. Quarterly and annual historical summaries for the latest 16 years are also included.

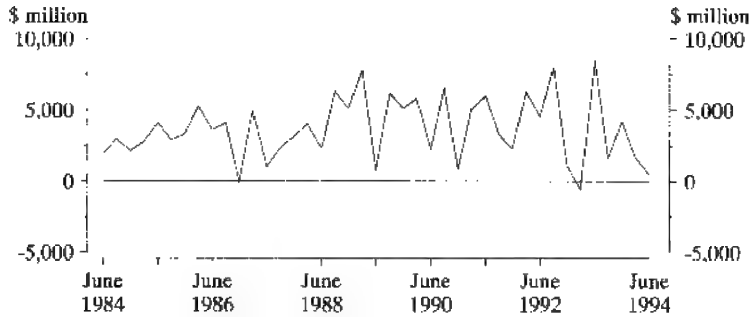
- ☐ *Balance of Payments, Australia* (5303.0)
  Contains detailed annual balance of payments tables on current and capital account transactions for the latest 6 years. See the feature articles in the 1992–93 publication for balance of payments ratios and for international comparisons of balance of payments statistics.

2.2.3 Balance of Payments Capital Account

Comment

The balance on the capital account changes markedly from quarter to quarter. The balance on the capital account usually records a surplus, and reached its highest ever quarterly level in June quarter 1993. This surplus was preceded in March quarter 1993 by a small capital account deficit. This volatility reflects, in part, the huge gross flows which underlie the balance on capital account and the difficulties associated with recording them in the correct time period.

BALANCE ON CAPITAL ACCOUNT



Source: ABS 5302.0, Quarterly data

BALANCE OF PAYMENTS, CAPITAL ACCOUNT
($ million)

Period	*Balance on capital account*
ANNUAL	
1988–89	20,074
1989–90	19,324
1990–91	18,404
1991–92	16,444
1992–93	16,895
1993–94	7,966
QUARTERLY	
1992–93—	
December	1,090
March	–570
June	8,447
1993–94—	
September	1,599
December	4,200
March	1,708
June	459

Source: ABS, *Balance of Payments Australia* (5302.0).

Explanatory Notes

The capital account provides information on transactions in Australia's foreign financial assets and liabilities, such as foreign borrowing and lending by Australian residents, equity investments and purchases and sales of official reserve assets.

The flows covered by the account are grouped into two major categories:

- Official capital, that is, transactions involving State and Commonwealth governments and the Reserve Bank; and
- Non-official capital, that is, transactions involving financial enterprises, non-financial trading enterprises and households. Government-owned financial and trading enterprises, such as the Commonwealth Bank and Telecom are included in the non-official sector.

Credit entries in the capital account are net inflows, resulting from a reduction in Australian investment abroad and/or an increase in foreign investment in Australia. Debit entries are net outflows and reflect the reverse situation. Like the current account, credit entries are shown without sign while debit entries have a negative sign.

A positive capital account balance (a net inflow) occurs when the increase in Australia's liabilities to foreign countries (or the reduction in claims on foreign countries) in a period exceeds the increase in Australia's claims on foreign countries (or the reduction in liabilities to foreign countries).

In principle, such a net inflow of capital occurs when a country has a current account deficit. In other words, to finance this deficit, it draws on savings from the rest of the world.

A negative capital account balance (a net outflow) occurs when the increase in Australia's claims on foreign countries (or the reduction in liabilities to foreign countries) in a period exceeds the increase in its liabilities to foreign countries (or the reduction in claims on foreign countries).

In principle, such a net outflow of capital occurs when a nation has a current account surplus. In other words, the net outflow for nations with such a surplus represents the extent to which they provide their domestic savings to the rest of the world.

Further Reading

☐ *Balance of Payments, Australia* (5302.0)
Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted and constant price estimates of the current account. Quarterly and annual historical summaries for the latest 16 years are also included.

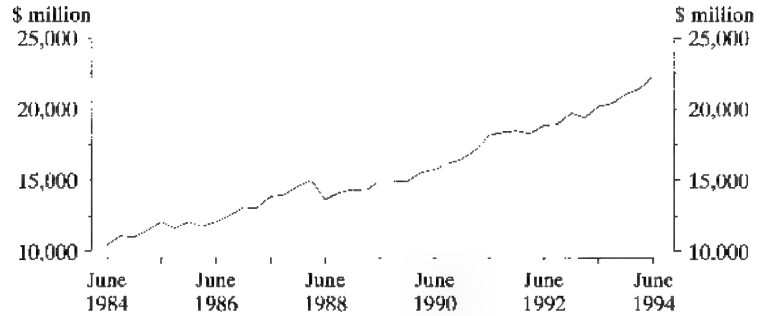
☐ *Balance of Payments, Australia* (5303.0)
Contains detailed annual balance of payments tables on current and capital account transactions for the latest 6 years. See the feature articles in the 1992–93 publication for balance of payments ratios and for international comparisons of balance of payments statistics.

2.2.4 Exports of Goods and Services

Comment

In seasonally adjusted constant price terms, Australia's total exports of goods and services generally increased over the period September 1984 to June 1994. The major contributing factors to this increase were non-rural merchandise exports and services credits.

TOTAL EXPORTS OF GOODS AND SERVICES AT AVERAGE 1989-90 PRICES, SEASONALLY ADJUSTED



Source: ABS 5302.0, Quarterly data

EXPORTS OF GOODS AND SERVICES AT AVERAGE 1989-90 PRICES
($ million)

Period	*Merchandise exports f.o.b. (a) rural*	*Merchandise exports f.o.b. (a) non-rural*	*Merchandise exports f.o.b. (a) total*	*Services credits*	*Total*
		ANNUAL			
1988–89	15,925	29,674	45,599	12,194	57,793
1989–90	15,344	33,220	48,564	12,465	61,029
1990–91	16,439	38,050	54,489	13,413	67,902
1991–92	18,158	41,646	59,804	14,238	74,042
1992–93	18,960	43,997	62,957	15,280	78,237
1993–94	20,391	47,959	68,350	16,831	85,181
		QUARTERLY — SEASONALLY ADJUSTED			
1992–93—					
December	4,898	11,087	15,985	3,738	19,723
March	4,662	10,879	15,541	3,847	19,388
June	4,865	11,256	16,121	4,063	20,184
1993–94—					
September	4,729	11,578	16,307	4,127	20,434
December	5,016	11,863	16,879	4,186	21,065
March	5,358	11,978	17,336	4,108	21,444
June	5,346	12,608	17,954	4,373	22,327

(a) Balance of payments basis.
Source: ABS, *Balance of Payments, Australia* (5302.0).

Explanatory Notes

Exports are goods and services that are provided to foreign residents. In the balance of payments they appear as a credit item on the current account and are presented separately to assist analysis.

In balance of payments publications, goods are categorised as merchandise exports and classified into rural and non-rural exports. Within each of these classifications a further, more specific break-up is published so that the trading performance of different commodity groups can be monitored. The term merchandise exports refers to all movable goods which change ownership from residents to non-residents. These are valued in f.o.b. (free on board) terms which means that transportation and insurance costs are excluded.

Exports of services are services provided by Australian residents to non-residents. These are shown in the balance of payments as services credits and categorised into groups such as shipment, other transportation, travel and other services.

Exports are important because they are an added source of income for domestic producers and because they provide the foreign exchange needed to pay for imports. Export levels are dependent on the demand for Australian products and services in the world market and on the price charged for those goods and services. This price can alter if there are fluctuations in the exchange rate of the Australian Dollar. If the Australian Dollar depreciates (falls in value), Australian exports will generally become cheaper for foreign residents and consequently they may demand more Australian goods and services. Alternatively, if the Australian Dollar appreciates (rises in value), Australian exports will generally become more expensive for foreign residents and they may demand less of our goods and services as a result.

Further Reading

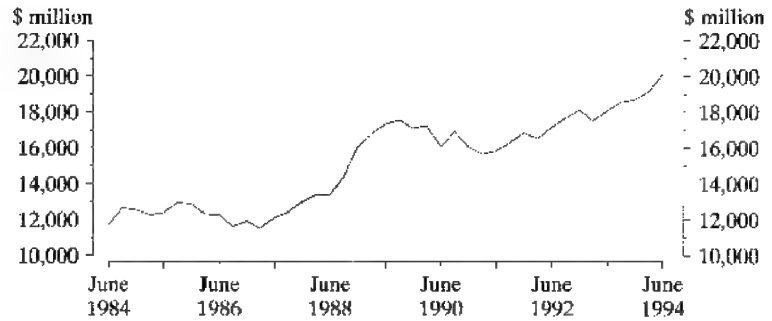
- *International Merchandise Trade, Australia* (5422.0)
  Provides quarterly information on the value of exports of goods with selected countries and country groups classified by commodity and details of exports by State. Historical data for the latest 12 years are also included.

2.2.5 Imports of Goods and Services

Comment

In seasonally adjusted constant price terms, total imports of goods and services generally rose over the period between March quarter 1987 and September quarter 1989, with the strongest increase taking place after June quarter 1988. From September quarter 1989, imports of goods and services slightly declined until March quarter 1991, after which they again started to increase.

TOTAL IMPORTS OF GOODS AND SERVICES AT AVERAGE 1989-90 PRICES, SEASONALLY ADJUSTED



Source: ABS 5302.0, Quarterly data

IMPORTS OF GOODS AND SERVICES AT AVERAGE 1989-90 PRICES (a)
($ million)

Period	*Merchandise imports f.o.b.*	*Services debits*	*Total*
	ANNUAL		
1988–89	48,913	15,572	64,485
1989–90	50,992	16,925	67,917
1990–91	48,478	15,992	64,470
1991–92	50,682	16,097	66,779
1992–93	55,066	16,312	71,378
1993–94	59,518	16,866	76,384
	QUARTERLY — SEASONALLY ADJUSTED		
1992–93—			
December	13,903	4,226	18,129
March	13,448	4,061	17,509
June	14,087	4,018	18,105
1993–94—			
September	14,463	4,108	18,571
December	14,599	4,099	18,698
March	14,757	4,371	19,128
June	15,780	4,311	20,091

(a) Balance of payments basis.
Source: ABS, *Balance of Payments, Australia* (5302.0).

Explanatory Notes

Imports are goods and services that are acquired from foreign residents. Other things being equal, an increase in imports will increase a current account deficit or reduce a current account surplus.

In balance of payments publications, imports of goods are referred to as merchandise imports and include all movable goods that change ownership from non-residents to residents. These imports are valued in f.o.b. (free on board) terms, which excludes the transportation and insurance costs (considered to be services) of bringing the goods to Australia. Merchandise imports are classified into three end use categories; *consumption goods, capital goods* and *intermediate and other goods*, which in turn are broken down into broad commodity groups such as food, chemicals, textiles, metals and metal manufactures, machinery, transport equipment, other manufactures and other imports.

Imports of services are services provided by non-residents to Australian residents. These are shown in the balance of payments as services debits and categorised into groups such as shipment, other transportation, travel and other services.

Further Reading

- ☐ *Merchandise Imports, Australia: Balance of Payments Basis* (5320.0)
  Provides the earliest release of monthly measures of merchandise imports on a balance of payments basis. Provides statistics under three end use categories (consumption goods, capital goods and intermediate and other goods), for 15 months and 3 years.

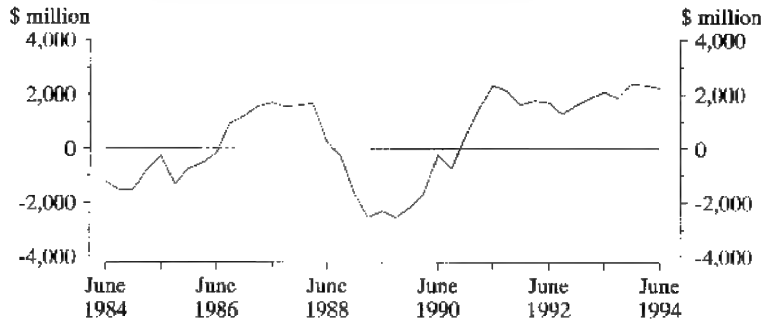
- ☐ *International Merchandise Trade, Australia* (5422.0)
  Provides quarterly information on the value of imports of goods with selected countries and country groups classified by commodity and details of imports by State. Historical data for the latest 12 years are also included.

2.2.6 Balance on Goods and Services

Comment

Australia's balance on goods and services, in seasonally adjusted constant price terms, deteriorated rapidly from March quarter 1988 to reach a deficit of $2,554m in March quarter 1989. A strong improvement in the balance of goods and services was recorded after September quarter 1989, eventually reaching a peak of $2,367m in December quarter 1993.

BALANCE ON GOODS AND SERVICES AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 5302.0, Quarterly data

BALANCE ON GOODS AND SERVICES AT AVERAGE 1989–90 PRICES
($ million)

Period	*Balance on merchandise trade*	*Net services*	*Balance on goods and services*
	ANNUAL		
1988–89	–3,314	–3,378	–6,692
1989–90	–2,429	–4,460	–6,889
1990–91	6,011	–2,579	3,432
1991–92	9,122	–1,859	7,263
1992–93	7,891	–1,032	6,859
1993–94	8,832	–35	8,797
	QUARTERLY — SEASONALLY ADJUSTED		
1992–93—			
December	2,082	–488	1,594
March	2,093	–214	1,879
June	2,034	45	2,079
1993–94—			
September	1,844	19	1,863
December	2,280	87	2,367
March	2,579	–263	2,316
June	2,174	62	2,236

Source: ABS, *Balance of Payments, Australia* (5302.0).

Explanatory Notes

The balance on goods and services refers to the net sum of exports and imports of goods and services. It is a useful and immediate indicator of a nation's overall trading position and appears in the current account section of the balance of payments.

A net debit (–) figure is referred to as a goods and services deficit and indicates that total imports of goods and services exceed total exports of goods and services. A surplus on the balance of goods and services appears as a credit item and indicates that total exports of goods and services exceed total imports of goods and services.

Within the balance on goods and services two other balances are presented, reflecting the division between goods and services.

Net services is the net sum of services credits (exports) and debits (imports) and identifies the extent of any surplus (+) or deficit (–) in the trade of services.

The balance on merchandise trade is the net sum of merchandise exports and merchandise imports. A merchandise trade surplus indicates that exports of merchandise exceeded imports of merchandise in the reference period and is shown as a credit in the balance of payments. A trade deficit is shown as a debit (–) and means that merchandise imports have exceeded merchandise exports.

Further Reading

- ☐ *Balance of Payments, Australia* (5302.0)
  Presents detailed quarterly data on the balance on goods and services for the last 10 quarters. Historical summaries of the latest 16 years are also included.

- ☐ *Balance of Payments, Australia* (5303.0)
  Presents detailed yearly data on the balance on goods and services.

- ☐ *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0)
  Provides a comprehensive description of the concepts and structure of the Australian balance of payments, including the data sources and methods used to compile the goods and services statistics, as shown in Australian balance of payments publications.

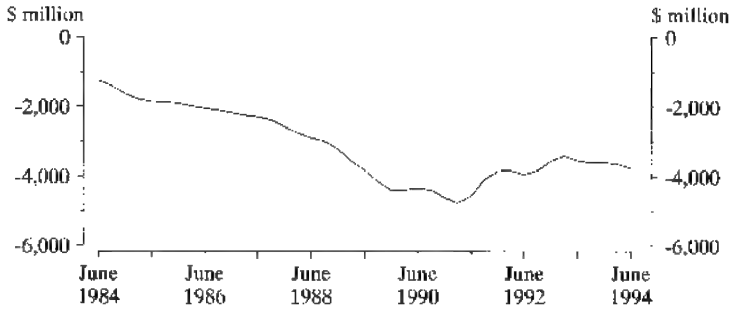
- ☐ *Balance of Payments, Australia: Summary of Concepts, Sources and Methods* (5351.0)
  Provides a summary of the comprehensive information contained in 5331.0 above, together with a table summarising the sources and methods for compiling each balance of payments item.

2.2.7 Net Income

Comment

Australia's net income deficit in trend estimate terms increased significantly to –$4,766m in March quarter 1991. Since March quarter 1991, the net income deficit has decreased to –$3,412m in March quarter 1993 before increasing to –$3,756m in June 1994.

NET INCOME, TREND



Source: ABS 5302.0, Quarterly data

NET INCOME
($ million)

Period	*Income credits*	*Income debits*	*Net income*
	ANNUAL		
1988–89	4,358	–17,979	–13,621
1989–90	4,679	–21,953	–17,274
1990–91	3,972	–22,138	–18,166
1991–92	4,257	–20,045	–15,788
1992–93	5,573	–19,818	–14,245
1993–94	5,543	–20,357	–14,814
	QUARTERLY — TREND		
1992–93—			
December	1,411	–4,969	–3,558
March	1,404	–4,816	–3,412
June	1,374	–4,906	–3,532
1993–94—			
September	1,453	–5,053	–3,600
December	1,488	–5,085	–3,597
March	1,419	–5,048	–3,629
June	1,263	–5,019	–3,756

Source: ABS, *Balance of Payments, Australia* (5302.0).

Explanatory Notes

The income item of the Balance of Payments covers income earned by Australian residents from non-residents (credits) and income earned by non-residents from Australian residents (debits). In broad terms, income relates to the return to the owner of a resource from the use of that resource by either the owner or another economic entity.

In the balance of payments current account, income is divided into three categories: investment income, other property income, and labour and other income.

Investment income refers to the earnings by owners of financial assets and commonly includes such items as dividends and interest. Earnings received by Australian residents from the ownership of foreign financial assets are shown as credits and the earnings received by non-residents from their ownership of Australian financial assets are shown as debits.

Other property income refers to the earnings by owners of intangible assets (i.e. patents, film rights, trademarks) or what is usually termed royalties. Royalties payable by residents to non-residents are debits and royalties received by residents from non-residents are credits.

Labour income refers to wages and salaries earned by residents from non-resident employers (credits) or wages and salaries earned by non-residents from resident employers (debits). Other income includes items such as extraordinary insurance claims.

The sum of the income debits with the income credits gives net income. Where income debits exceed income credits, a net income deficit occurs and where income credits exceed income debits, a net income surplus occurs. Australia has traditionally shown a net income deficit, mainly due to interest payments to non-residents to service our foreign debt.

Further Reading

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted and constant price estimates of the current account. Historical summaries for the latest 16 years are also included.

- ☐ *Balance of Payments, Australia* (5303.0)
  Contains detailed annual balance of payments tables on current and capital account transactions for the latest 6 years.

- ☐ *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0)
  Provides a comprehensive description of the concepts and structure of the Australian balance of payments, including the data sources and methods used to compile the income statistics as shown in Australian balance of payments publications.

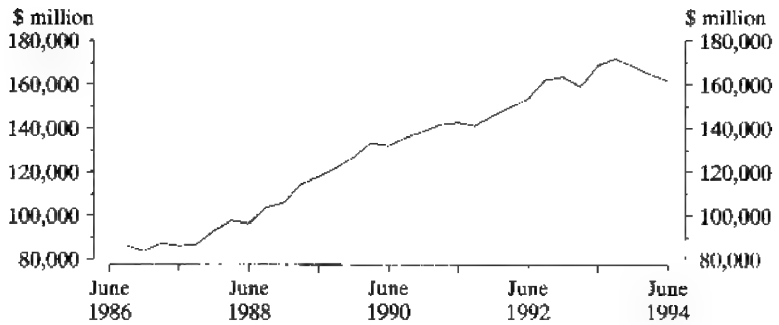
- ☐ *Balance of Payments, Australia: Summary of Concepts, Sources and Methods* (5351.0)
  Provides a summary of the comprehensive information contained in 5331.0 above, together with a table summarising the sources and methods for compiling each balance of payments item.

2.2.8 Foreign Debt

Comment

Australia's net foreign debt has risen at an average annual growth rate of 10.4% from September quarter 1986 to peak at $171,726m at 30 September 1993. Since September 1993, net foreign debt has declined to $161,524m at 30 June 1994.

NET FOREIGN DEBT AT END OF PERIOD



Source: ABS 5306.0, Quarterly data

LEVELS OF FOREIGN DEBT AT END OF PERIOD AND SELECTED RATIOS

Period	*Total gross debt (a) ($m)*	*Reserve assets ($m)*	*Lending abroad ($m)*	*Net foreign debt (a)(b) ($m)*	*Ratio of net foreign debt to GDP(I) (c)(%)*	*Ratio of net interest payable to exports of goods and services (d)(%)*
			ANNUAL			
1988–89	147,139	20,410	9,038	117,691	34.6	17.3
1989–90	163,137	21,871	9,035	132,231	35.7	20.7
1990–91	178,824	24,047	12,305	142,472	37.5	19.1
1991–92	190,408	22,240	14,668	153,499	39.6	15.7
1992–93	207,483	20,823	17,873	168,787	41.8	12.1
1993–94	202,925	20,663	20,738	161,524	38.0	11.3
			QUARTERLY			
1992–93—						
December	198,791	20,112	15,200	163,479	41.4	13.9
March	194,089	18,888	16,170	159,031	39.9	13.0
June	207,483	20,823	17,873	168,787	41.8	12.1
1993–94—						
September	215,041	22,023	21,292	171,726	42.0	11.8
December	208,204	20,955	18,670	168,579	40.7	11.2
March	208,860	20,834	23,333	164,693	39.3	11.2
June	202,925	20,663	20,738	161,524	38.0	11.3

(a) As a result of a change in the methodology used to value non-equity securities on foreign capital markets, levels from December quarter 1991 are not strictly comparable with levels for earlier periods. (b) Equals total gross debt less reserve assets and lending abroad. (c) Ratio derived by expressing net foreign liabilities at a particular date as a percentage of GDP for the year preceding this date. (d) Ratio derived by expressing net investment income payable as a percentage of exports of goods and services for the year preceding this date.
Source: ABS, *International Investment Position, Australia* (5306.0).

Explanatory Notes

Foreign debt is the amount borrowed from non-residents by residents of a country. It is distinguished from other components of international investment by the obligation to pay interest and/or repay principal. Components of Australia's international investment position excluded from foreign debt are equity investment, accounts payable or receivable and prepayments made or received.

Gross foreign debt is the total amount borrowed from non-residents. Net foreign debt is equal to gross foreign debt minus official reserve assets and lending by residents of Australia to non-residents.

A country borrows from overseas in order to spend more than it earns. The funds can be used to increase investment or consumption.

The level of debt is often expressed as a percentage of the national accounting measure of domestic production, Gross Domestic Product (GDP). This is done to place the extent of foreign debt in context and to enable valid comparisons over time and between countries. Movements in this ratio indicate the changing significance of foreign debt.

An economy's capacity to pay the costs associated with debt are portrayed by its debt service ratio. The debt service ratio shows the percentage of export earnings being used to meet interest payments on debt. The higher the proportion of export earnings used to service the debt, the lesser the economy's capacity to pay.

The level of foreign debt is important due to its effect on the Balance of Payments. The size of the current account deficit shows the excess of payments we have made to other nations over the payments we have received. Interest payments on debt owing to non-residents add directly to the current account deficit. The capital account shows how much we have had to borrow to finance the excess of payments over receipts.

Further Reading

- ☐ *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australia's gross and net foreign debt position by sector. See the feature article in the June 1988 issue for explanation of foreign debt ratios.

- ☐ *International Investment Position, Australia* (5305.0)
  Contains comprehensive annual data on Australia's gross and net foreign debt position by sector.

- ☐ *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

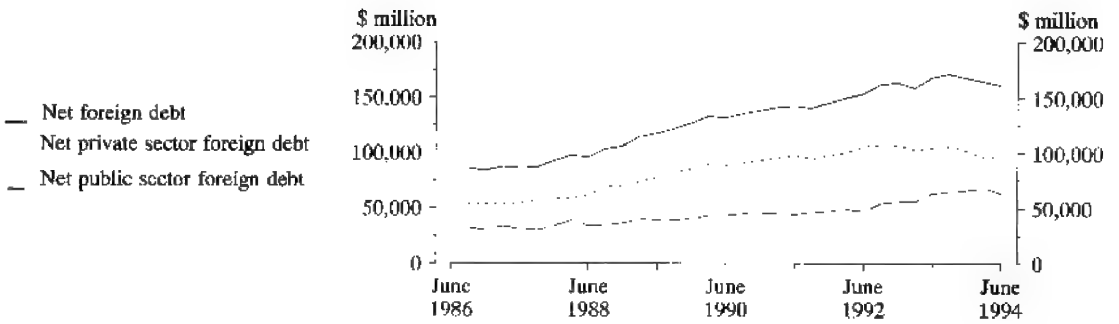
- ☐ *Australian Economic Indicators* (1350.0)
  See feature article in the November 1992 issue on foreign debt.

2.2.9 Composition of Net Foreign Debt

Comment

Net foreign debt has increased at an average annual rate of 10.4% from September quarter 1986 to June quarter 1993. Net foreign debt decreased from December 1992 to March 1993 quarters, primarily because of a fall in private sector debt. Continuing growth in public sector debt, however, led to growth in net foreign debt from March to September quarters 1993, after which further decreases in private sector debt contributed to a decrease in net foreign debt.

LEVELS OF NET FOREIGN DEBT AT END OF PERIOD



Source: ABS 5306.0, Quarterly data

LEVELS OF NET FOREIGN DEBT AT END OF PERIOD
($ million)

Period	*Public sector debt (a)*	*Private sector debt*	*Net foreign debt (b)*
	ANNUAL		
1988–89	39,275	78,416	117,691
1989–90	43,666	88,565	132,231
1990–91	44,712	97,760	142,472
1991–92	47,196	106,303	153,499
1992–93	63,776	105,011	168,787
1993–94	63,875	97,649	161,524
	QUARTERLY		
1992–93—			
December	56,864	106,615	163,479
March	56,062	102,969	159,031
June	63,776	105,011	168,787
1993–94—			
September	65,279	106,447	171,726
December	66,666	101,913	168,579
March	68,755	95,938	164,693
June	63,875	97,649	161,524

(a) Official plus non-official public sector debt. (b) Equals total gross debt less reserve assets and lending abroad.
Source: ABS, *International Investment Position, Australia* (5306.0).

Explanatory Notes

Australia's net foreign debt consists of net foreign debt incurred by the private sector and by the public sector.

Net public sector debt is the gross debt of Commonwealth, State and Local governments (which is termed official sector debt), and government business enterprises (which is termed non-official public sector debt) less official reserve assets and lending abroad by these resident entities.

The official sector debt makes up a relatively small share of Australia's net foreign debt. The largest share of net foreign debt is owed by the private sector and is the result of foreign borrowing by firms or individuals substantially exceeding their lending abroad.

Statistics on the composition of foreign debt are used to analyse the nature of our foreign debt. For example, having a large private sector debt is considered by many as more desirable than having a large official sector debt, since it is assumed that the private sector is more likely to borrow to finance investment rather than consumption.

The composition of foreign debt may also be examined by industry, country, currency and maturity structure.

Further Reading

- ☐ *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australia's gross and net foreign debt position. See the feature article in the June 1988 issue for explanation of foreign debt ratios.

- ☐ *International Investment Position, Australia* (5305.0)
  Contains comprehensive annual data on Australia's gross and net foreign debt position.

- ☐ *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

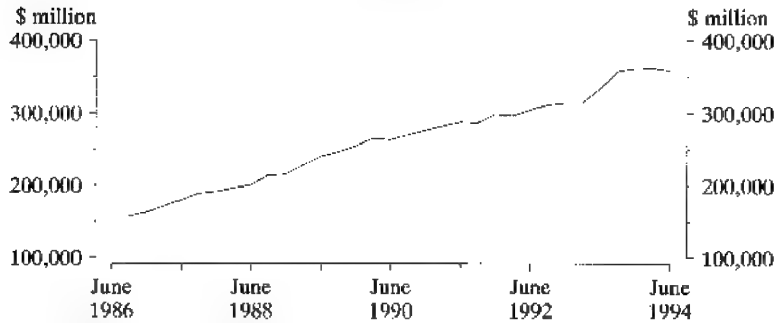
- ☐ *Australian Economic Indicators* (1350.0)
  See feature article in the November 1992 issue on foreign debt.

2.2.10 Foreign Investment in Australia

Comment

The level of foreign investment in Australia has recorded steady growth between March quarter 1987 and March quarter 1993, averaging an annual growth rate of 10.7%. The level of foreign investment in Australia increased sharply from $315,009m at 31 March 1993 to $358,231m at 30 September 1993 and has remained fairly constant since with the level at 30 June 1994 being $358,955m.

LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA AT END OF PERIOD — TOTAL



Source: ABS 5306.0, Quarterly data

LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA AT END OF PERIOD
($ million)

Period	*Equity*	*Borrowing (a)*	*Other*	*Total*
		ANNUAL		
1988–89	85,411	147,139	7,405	239,955
1989–90	94,279	163,137	6,425	263,841
1990–91	102,292	178,824	6,431	287,547
1991–92	107,648	190,408	6,745	304,801
1992–93	119,552	207,483	6,760	333,795
1993–94	147,203	202,925	8,827	358,955
		QUARTERLY		
1992–93—				
December	109,042	198,791	7,422	315,254
March	113,874	194,089	7,045	315,009
June	119,552	207,483	6,760	333,795
1993–94—				
September	135,286	215,041	7,904	358,231
December	144,388	208,204	8,778	361,369
March	145,568	208,860	8,354	362,782
June	147,203	202,925	8,827	358,955

(a) Levels of borrowing from the end of December quarter 1991 are not strictly comparable with levels for earlier periods because of changes in the method used to value non-equity securities issued on foreign capital markets.
Source: ABS, *International Investment Position, Australia* (5306.0).

Explanatory Notes

Foreign investment in Australia refers to the stock of Australian liabilities owed to non-residents; and capital transactions and other changes which increase or decrease this stock.

Foreign investment can take many forms and involves both public and private sectors of the Australian economy. The type of investment will affect the amount of influence or control the foreign investor has over Australian physical assets.

For example, foreign investment in government securities does not result in foreign control of Australian physical assets, while equity investment in companies may involve the transfer of control.

The concept of direct investment is broadly one of capital invested in an enterprise by an investor having a significant influence, either potentially or actually exercised, over the key policies of the enterprise. Direct investment is defined as any investment between two enterprises (or an individual and an enterprise) in a direct investment relationship.

For foreign investment in Australia, a direct investment relationship is deemed to exist between a resident enterprise and a foreign individual or enterprise having an equity interest in that resident enterprise of at least 10%.

The level and composition of foreign investment in Australia are important in their own right in assessing, for example, the effectiveness of government policy, changing finance patterns and relationships with other countries. They are also important in terms of their impact on the balance of payments. For example, earned income by non-residents on their investments in Australia are payments we make to other nations and cause a rise in a current account deficit or a decline in a current account surplus.

Further Reading

- ☐ *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australian investment abroad, by institutional sector and type of investment.

- ☐ *International Investment Position, Australia* (5305.0)
  Contains comprehensive annual data on Australian investment abroad, by institutional sector and type of investment.

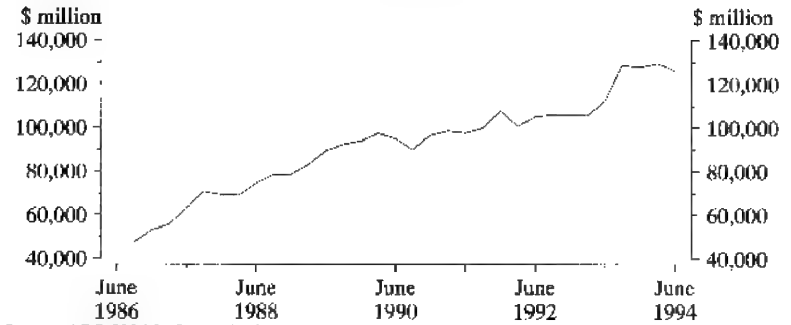
- ☐ *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

2.2.11 Australian Investment Abroad

Comment

The level of Australian investment abroad increased steadily between March 1988 and March 1990. From March 1990 to June 1994 Australian investment abroad generally increased with a series of falls in investment being offset by increases in subsequent quarters.

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD — TOTAL



Source: ABS 5306.0, Quarterly data

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD ($ million)

Period	*Equity*	*Reserve assets and lending (a)*	*Other*	*Total*
		ANNUAL		
1988–89	52,720	29,448	7,278	89,446
1989–90	56,411	30,906	7,857	95,174
1990–91	53,881	36,352	7,663	97,896
1991–92	61,791	36,908	6,565	105,265
1992–93	66,668	38,696	7,321	112,685
1993–94	75,947	41,401	8,910	126,258
		QUARTERLY		
1992–93—				
December	63,632	35,312	7,077	106,020
March	63,966	35,058	6,901	105,925
June	66,668	38,696	7,321	112,685
1993–94—				
September	77,784	43,315	7,659	128,757
December	80,447	39,625	7,887	127,958
March	78,018	44,167	7,517	129,703
June	75,947	41,401	8,910	126,258

(a) Levels of lending from the end of December quarter 1991 are not strictly comparable with levels for earlier periods because of changes in the method used to value non-equity securities issued on foreign capital markets.
Source: ABS, *International Investment Position, Australia* (5306.0).

Explanatory Notes

Australian investment abroad refers to the stock of foreign financial assets (claims on non-residents) owned by Australian residents; and capital transactions and other changes which increase or decrease this stock.

Australian's invest in foreign countries for a variety of reasons including: the securing and maintenance of market share, sales promotion, effective marketing, avoidance of tariffs and import restrictions, securing of raw materials and to take advantage of cheaper inputs or higher rates of return on investments or to spread their risk.

Earnings from Australian investment abroad form a component of the current account of the balance of payments. The income earned by Australia's investments abroad is income payable to Australia. A rise in earnings increases a current account surplus or reduces a current account deficit.

Further Reading

- ☐ *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australian investment abroad, by institutional sector and type of investment.

- ☐ *International Investment Position, Australia* (5305.0)
  Contains comprehensive annual data on Australian investment abroad, by institutional sector and type of investment.

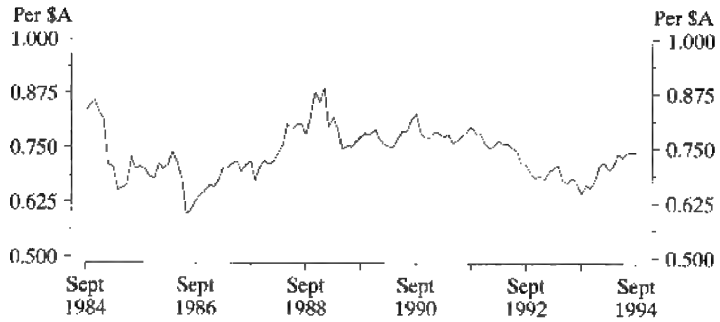
- ☐ *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

2.2.12 Exchange Rates

Comment

The value of the Australian dollar ($A), as measured against the United States dollar ($US), depreciated sharply, falling as low as $0.60 in July 1986. In 1984 following the floating of the Australian dollar, the $A reached a peak of $0.89 in January 1989 then fell to $0.65 in September 1993. A slight upturn was recorded from December 1993, reaching $0.74 in July 1994.

UNITED STATES DOLLAR PER AUSTRALIAN DOLLAR



Source: ABS 5302.0, Quarterly data

EXCHANGE RATES: CURRENCY PER AUSTRALIAN DOLLAR (a)

Period	*United States dollar*	*United Kingdom pound*	*German mark*	*Japanese yen*
		ANNUAL		
1988–89	0.76	0.49	1.48	108.79
1989–90	0.79	0.45	1.32	120.41
1990–91	0.77	0.47	1.38	106.19
1991–92	0.75	0.39	1.14	94.05
1992–93	0.67	0.45	1.14	71.54
1993–94	0.73	0.47	1.16	72.20
		MONTHLY		
1993–94—				
July	0.68	0.46	1.19	72.41
August	0.67	0.45	1.12	69.93
September	0.65	0.43	1.05	67.85
October	0.67	0.45	1.11	72.17
November	0.66	0.44	1.13	71.77
December	0.68	0.46	1.18	75.80
January	0.71	0.48	1.24	78.11
February	0.72	0.48	1.23	74.67
March	0.70	0.47	1.17	72.04
April	0.71	0.47	1.24	72.20
May	0.74	0.49	1.21	76.85
June	0.73	0.47	1.16	72.20
1994–95—				
July	0.74	0.48	1.18	73.86
August	0.74	0.48	1.17	73.82
September	0.74	0.47	1.15	72.88

(a) Rates are for the last trading day of the reference period.
Source: RBA, *Reserve Bank of Australia Bulletin.*

Explanatory Notes

The price of one currency against another is known as the exchange rate. For example, at the end of September 1992 one Australian dollar would purchase 0.71 United States dollars, 0.40 United Kingdom pounds and 85 Japanese yen. Similarly, 0.71 United States dollars would purchase one Australian dollar. Therefore, the exchange rate can be used as a measure of a currency's value.

Exchange rates vary over time. When the exchange rate for the Australian dollar against another currency rises (appreciates) it will buy more of the foreign currency.

Exchange markets in which currencies are bought and sold facilitate world trade. When selling goods and services abroad Australian residents receive foreign currencies which can be used as payment for imports of goods and services.

The value of the exchange rate affects the price that Australia receives for its exports and pays for its imports. Generally when the exchange rate for a country's currency appreciates the price residents pay for imports declines, while for non-residents our exports become more expensive. Alternatively, a currency depreciation will cause the price of imports into Australia to rise and lower the international price of our exports. These changes can affect the demand for imports and exports and, hence, the balance of payments.

Further Reading

- ☐ *Average Monthly Exchange Rates* (5654.0)
  Available by subscription. Contains averages of daily exchange rates for approximately 35 currencies, including both the buying and selling rates, and final day trading values against major currencies.

- ☐ *Balance of Payments, Australia* (5301.0)
  Contains monthly average and end of month exchange rates of the major currencies for the latest 15 months.

- ☐ *Balance of Payments, Australia* (5302.0)
  Contains quarterly average and end of quarter exchange rates of the major currencies for the latest 10 quarters.

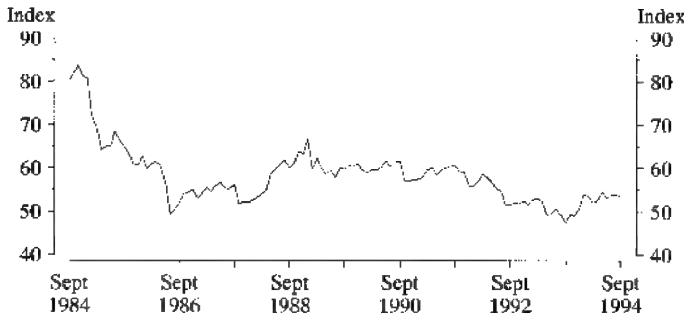
- ☐ *Balance of Payments, Australia* (5303.0)
  Contains yearly average and end of year exchange rates of the major currencies for the latest 6 years.

2.2.13 Trade-weighted Index

Comment

The value of the Australian dollar ($A), as measured against other currencies by the trade-weighted index, fell sharply following the floating of the Australian dollar in 1984. This marked the beginning of a volatile period where the index declined overall to reach its lowest level (47.3) at the end of September 1993. Since then it has strengthened reaching 53.4 at the end of September 1994.

TRADE WEIGHTED INDEX (MAY 1970 = 100.0)



Source: ABS 5302.0, Quarterly data

TRADE WEIGHTED INDEX AND UNITED STATES DOLLAR EXCHANGE RATE AT END OF PERIOD (a)

Period	*Trade weighted index (b)*	*United States dollar (per $A)*
	ANNUAL	
1988–89	59.40	0.76
1989–90	61.60	0.79
1990–91	59.70	0.77
1991–92	55.20	0.75
1992–93	49.55	0.67
1993–94	53.05	0.73
	MONTHLY	
1993–94—		
July	50.60	0.68
August	49.30	0.67
September	47.30	0.65
October	49.40	0.67
November	49.10	0.66
December	50.80	0.68
January	54.00	0.71
February	53.60	0.72
March	52.10	0.70
April	52.60	0.71
May	54.60	0.74
June	53.00	0.73
1994–95		
July	53.90	0.74
August	53.90	0.74
September	53.40	0.74

(a) Rates are for the last trading day of the reference period. (b) May 1970 = 100.0.
Sources: ABS, *Balance of Payments, Australia* (5301.0) and RBA, *Reserve Bank of Australia Bulletin.*

Explanatory Notes

The Australian exchange rate is usually quoted in terms of its exchange with the United States dollar ($US).

However, to get a more comprehensive indication of Australia's exchange rate a trade-weighted index (TWI) is used. The TWI measures changes in our currency relative to the currencies of our main trading partners. Taken into account is the relative importance of trade occurring between each country and Australia. Over time, international trade patterns tend to alter, making it necessary to modify the weights to reflect the new trade patterns. The last update by the Reserve Bank of Australia (RBA) occurred in October 1992.

The RBA's trade-weighted index includes 23 countries that account for at least 90 per cent of Australia's two-way trade.

The TWI is an absolute number and does not express the price of any one currency in another. Calculation of the TWI is based on the exchange rates for the $A against the chosen currencies at 4 p.m. for each trading day.

Further Reading

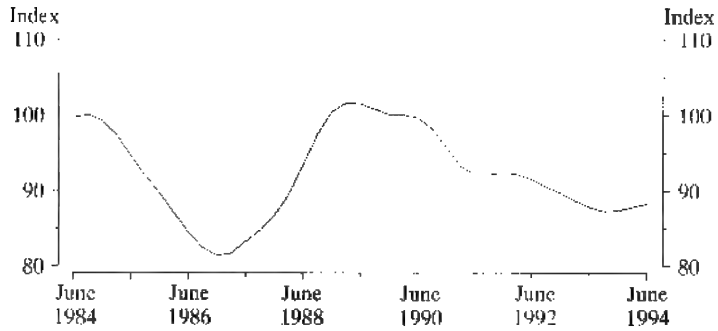
- ☐ *Balance of Payments, Australia* (5301.0)
  Contains monthly average and end of month exchange rates of the major currencies for the latest 15 months.
- ☐ Balance of Payments, Australia (5302.0)
  Contains the quarterly average and end of quarter trade-weighted index for the latest 10 quarters.
- ☐ *Balance of Payments, Australia* (5303.0)
  Contains the yearly average and end of year trade-weighted index for the latest 6 years.

2.2.14 Terms of Trade

Comment

Australia's terms of trade for goods and services, in trend estimate terms, fell sharply from September quarter 1984 to the lowest level recorded in December quarter 1986 before recovering to peak in March quarter 1989. Since then, Australia's terms of trade have declined in most quarters but at a slower rate than the 1984-86 decline.

TERMS OF TRADE FOR GOODS AND SERVICES
TREND (1989-90 = 100.0)



Source: ABS 5206.0, Quarterly data

TERMS OF TRADE FOR GOODS AND SERVICES
(1989-90 = 100.0)

Period	*Terms of trade*
ANNUAL	
1988–89	100.6
1989–90	100.0
1990–91	94.8
1991–92	92.3
1992–93	89.2
1993–94	87.6
QUARTERLY — TREND	
1992–93—	
December	89.7
March	88.7
June	87.8
1993–94—	
September	87.3
December	87.4
March	87.8
June	88.3

Source: ABS, *Australian National Accounts: National Income and Expenditure* (5206.0).

Explanatory Notes

A country's terms of trade shows a country's export prices relative to its import prices. It is expressed as an index, which is calculated by dividing an index of prices received for exports by an index of prices paid for imports.

A rise in the index implies an improvement in a country's terms of trade, so it becomes possible to purchase more imports with the same amount of exports. Improvement in a country's terms of trade occurs when export prices rise, when import prices fall or when export prices rise at a faster rate than import prices, or when export prices fall at a slower rate than import prices.

A fall in the index occurs when a country's terms of trade deteriorates. It is necessary to export more to purchase the same amount of imports. A deterioration occurs when import prices rise, when export prices fall or when import prices rise at a faster rate than export prices, or when import prices fall at a slower rate than export prices.

Further Reading

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides estimates of the price indexes of exports and imports and also a measure of terms of trade for the latest 10 quarters. See the feature article in the September 1990 issue for an explanation of the measurement of Australia's terms of trade.

- ☐ *Foreign Trade, Australia: Merchandise Exports and Imports* (5410.0)
  Contains comparative time series for the latest 6 years covering export and import price index information as well as terms of trade statistics. Final issue 1992-93.

- ☐ *Australian Economic Indicators* (1350.0)
  See the feature article in the December 1991 issue on the review of the Import Price Index.

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Provides estimates of the terms of trade back to September quarter 1984. A 'Technical Note' in the September quarter 1993 issue explains the concept of 'real gross domestic income' which involves adjusting GDP for the effects of changes in the terms of trade.

- ☐ *International Trade, Australia: Merchandise Exports and Imports by Country* (5422.0)
  Provides quarterly data on exports and imports by selected industry and commodity, by major country groups and exports and imports by State.

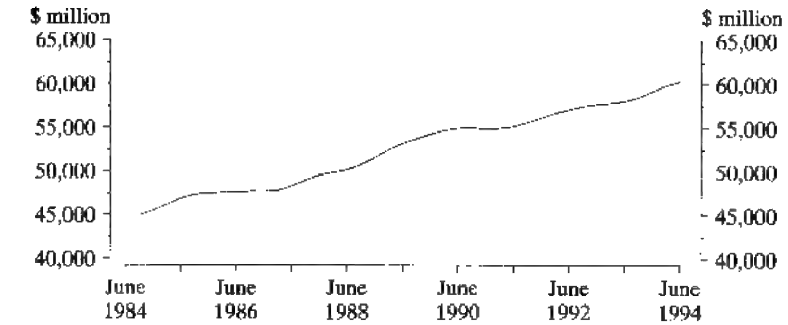
Section 2.3
Domestic Consumption and Investment

2.3.1 Private Final Consumption Expenditure

Comment

Private final consumption expenditure in trend estimate constant price terms has shown steady growth during the 1980s and 1990s. From June quarter 1985 to June quarter 1994, private final consumption expenditure grew at an average annual rate of 2.8%, experiencing a decrease only in December quarter 1990.

TOTAL PRIVATE FINAL CONSUMPTION EXPENDITURE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

SELECTED COMPONENTS OF PRIVATE FINAL CONSUMPTION EXPENDITURE AT AVERAGE 1989–90 PRICES
($ million)

Period	*Food*	*Clothing, fabrics and footwear*	*Health*	*Dwelling rent*	*Total*
		ANNUAL			
1988–89	30,961	13,091	14,394	38,228	208,070
1989–90	31,623	12,914	14,948	39,637	217,817
1990–91	32,348	12,548	15,381	40,818	219,976
1991–92	33,287	13,045	15,812	41,863	225,540
1992–93	34,352	13,036	16,663	43,124	231,243
1993–94	35,477	13,438	17,764	44,489	237,716
		QUARTERLY — TREND			
1992–93—					
December	8,569	3,256	4,140	10,738	57,728
March	8,577	3,251	4,192	10,824	57,875
June	8,622	3,257	4,259	10,905	58,079
1993–94—					
September	8,721	3,290	4,332	10,987	58,560
December	8,829	3,345	4,405	11,075	59,230
March	8,928	3,397	4,480	11,169	59,853
June	9,010	3,430	4,537	11,264	60,342

Source: ABS, *Australian National Accounts: National Income and Expenditure* (5206.0).

Explanatory Notes

Private final consumption expenditure measures current expenditure by households and producers of private non-profit services to households, such as charities, clubs, trade unions and private schools. The outlays covered include expenditure on consumer durables such as cars, furniture and long lasting household appliances; consumer semi-durables such as clothing and other appliances; single use goods such as food; and services of all kinds, for example, hairdressing and public transport.

Private final consumption expenditure makes up over half of GDP(E) and is the largest component of aggregate demand. Consequently, changes in private final consumption expenditure from one period to another have a significant impact on overall changes in GDP(E). A fall in demand for consumer goods and services will be reflected in falling private final consumption expenditure. On the other hand, a rise in demand for consumer goods and services will be reflected in increasing private final consumption expenditure.

The level of private final consumption expenditure is dependent on a number of factors including: present and anticipated future levels of income, expenditure and saving habits, relative price levels and the rate of inflation.

Economic policy makers may attempt to influence the level of private final consumption expenditure to dampen or stimulate the economy by altering the level of household disposable income through taxation or wages policy.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5204.0)
  Contains annual data for the last 12 years of the components of private final consumption expenditure.

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data for the last 9 quarters of the components of private final consumption expenditure.

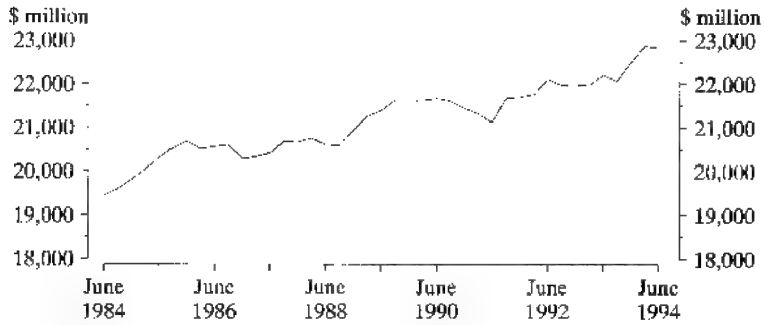
- ☐ *Australian National Accounts, Concepts, Sources and Methods,* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

2.3.2 Retail Turnover

Comment

Between 1984 and 1994 turnover of retail establishments in seasonally adjusted constant price terms, has recorded variable movement with an overall upward trend, averaging an annual growth rate of 1.6% for the 10 years ending June 1994. A significant decrease occurred in 1990–91 when turnover fell 2.5% from $21,663.7m in June quarter 1990 to $21,114.9m in June quarter 1991.

TURNOVER OF RETAIL ESTABLISHMENTS AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 8501.0, Quarterly data

TURNOVER OF RETAIL ESTABLISHMENTS AT AVERAGE 1989–90 PRICES
($ million)

Period	*Total*
ANNUAL	
1988–89	84,406.9
1989–90	86,659.7
1990–91	85,357.2
1991–92	87,289.2
1992–93	88,148.7
1993–94	90,341.0
QUARTERLY — SEASONALLY ADJUSTED	
1992–93—	
December	21,991.4
March	21,956.5
June	22,201.0
1993–94—	
September	22,070.4
December	22,491.0
March	22,874.1
June	22,831.5

Source: ABS, *Retail Trade, Australia* (8501.0).

Explanatory Notes

This series presents estimates of turnover for retail (i.e. grocers, clothing stores, department stores, etc.) and selected service businesses (such as cafes and restaurants, hotels and licensed clubs, etc.) for each State and Territory. Turnover includes retail sales, wholesale sales, takings from repairs, meals and hiring of goods (except for rent, leasing and hiring of land and buildings) and commissions from agency activity (e.g. commissions received from collecting dry cleaning).

The data are provided in original terms and in seasonally adjusted terms, the latter removing the estimated effects of normal seasonal variation, such as Christmas or Easter trading, from the series. Seasonal adjustment also takes account of trading effects arising from the varying length of each month and the varying number of Fridays, Saturdays, Sundays, etc. during the month. Seasonally adjusted data still contain the effects of irregular influences such as strikes. These irregular influences are significantly dampened in trend series of retail turnover produced by the ABS.

To enable the analysis of retail activity in 'real terms', estimates of retail turnover at constant (average 1989–90) prices are compiled each quarter. This removes the effects of price increases over time.

The retail trade series dates back to 1965 and is one of the main economic indicator series of the ABS. It provides economists with an indication of the current economic picture and enables them to make assessments, in conjunction with other economic indicators, of the direction the Australian economy is taking.

Further Reading

- ☐ *Retail Trade, Australia* (8501.0)
  Contains monthly estimates of turnover for retail establishments for Australia, each State and Territory, and by industry.

- ☐ *Retail Trade, Commodity Details 1988–89 and 1989–90, Australia* (8512.0)
  Contains details by industry of the value of retail sales by commodity item.

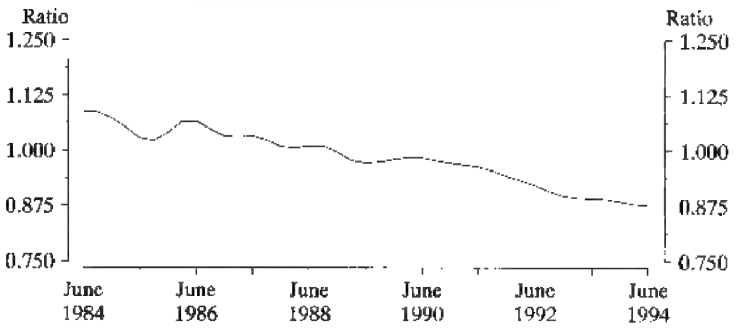
- ☐ *Australian Economic Indicators* (1350.0)
  See the feature article in the August 1991 publication for a time series decomposition of retail trade.

2.3.3 Private Non-farm Stocks to Sales Ratio

Comment

The trend private non-farm stocks to sales ratio has declined steadily to June quarter 1994. This decline was more pronounced between June quarter 1982 and September quarter 1985. One of the likely factors behind the general decrease in the non-farm stocks to sales ratio is the adoption by businesses of more cost-effective stock management systems.

PRIVATE NON-FARM STOCKS TO SALES RATIO AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

PRIVATE NON-FARM STOCKS TO SALES RATIO AT AVERAGE 1989–90 PRICES
($ million)

Period	*Private non-farm stock levels*	*Sales*	*Private non-farm stocks to sales ratio* (a)
	ANNUAL		
1988–89	52,106	210,914	0.992
1989–90	57,436	233,779	0.985
1990–91	57,491	236,728	0.974
1991–92	55,805	238,310	0.939
1992–93	56,253	250,540	0.901
1993–94	57,861	262,429	0.884
	QUARTERLY — TREND		
1992–93—			
December	56,033	62,415	0.898
March	56,327	63,089	0.893
June	56,721	63,624	0.892
1993–94—			
September	57,134	64,226	0.890
December	57,568	65,121	0.884
March	58,079	66,046	0.879
June	58,649	66,937	0.876

(a) Annual derived from simple average of original quarterly ratios.
Sources: ABS, *Australian National Accounts: National Income and Expenditure* (5206.0) and *Stocks, Manufacturers' Sales and Expected Sales, Australia* (5629.0).

Explanatory Notes

The private non-farm stocks to sales ratio gives the indication of the value of stocks (or inventories) held by private sector businesses other than those in farming compared with sales in a given period of time.

Private non-farm stocks are defined to include goods for sale (either of own production or purchased for resale), work in progress, raw materials and stores of all non-farm industries. All private non-farm industries are covered, with the major stock-holding industries being manufacturing, wholesale trade, retail trade and mining. Sales are defined as private final consumption expenditure on goods plus private fixed capital expenditure on dwellings, non-dwelling construction and equipment plus public gross fixed capital expenditure plus exports of non-rural goods.

Private non-farm stock levels may fluctuate significantly with changes in economic activity. Such periodic fluctuations in the level of non-farm stocks are often referred to as the 'stocks cycle'. It should be noted that there has been a general decline in the private non-farm stocks to sales ratio since the early 1980s as businesses have adopted more cost-effective stock management systems.

The private non-farm stocks to sales ratio is an important indicator of future business intentions. An increase in the ratio may indicate that businesses have decided to build up stocks in anticipation of increased sales. On the other hand, the ratio may fall as businesses decide to run down their stocks if sales are expected to weaken.

Of course, at times there will also be some unplanned stock build-ups or run-downs. If sales are higher than expected, then stock levels will be less than planned. Conversely, if sales are lower than anticipated, then there will be an increase in stock holdings in the short term. In this way, stocks act as the buffer between changes in demand and the supply of goods available to meet that demand.

Further Reading

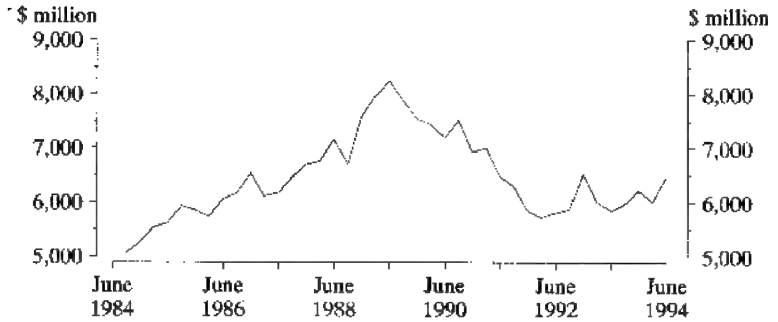
- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains stocks to sales ratio in 1989–90 seasonally adjusted and trend terms.

2.3.4 Private New Capital Expenditure

Comment

Business confidence grew strongly during the 1980s with actual new private capital expenditure, seasonally adjusted constant prices, increasing to peak at $8,244m in June quarter 1989. Following this peak, private new capital expenditure decreased to $5,725m in March quarter 1992. Despite quarterly fluctuations the series has recorded a slight upward trend from June quarter 1992.

ACTUAL PRIVATE NEW CAPITAL EXPENDITURE AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 5626.0, Quarterly data

ACTUAL PRIVATE NEW CAPITAL EXPENDITURE AT AVERAGE 1989–90 PRICES ($ million)

Period	*Buildings and structures*	*Equipment, plant and machinery*	*Total*
	ANNUAL		
1988–89	11,659	18,855	30,514
1989–90	11,467	18,611	30,078
1990–91	10,671	17,184	27,855
1991–92	8,103	15,569	23,673
1992–93	7,845	16,470	24,315
1993–94	7,663	17,017	24,680
	QUARTERLY — SEASONALLY ADJUSTED		
1992–93—			
December	2,026	4,498	6,524
March	1,876	4,144	6,020
June	1,852	3,998	5,850
1993–94—			
September	1,776	4,202	5,978
December	2,018	4,195	6,213
March	2,008	4,006	6,014
June	1,899	4,582	6,481

Source: ABS, *Private New Capital Expenditure, Australia, Actual and Expected Expenditure* (5626.0).

Explanatory Notes

Private new capital expenditure is also referred to as business fixed investment. It is defined as all spending by Australian business on new fixed tangible assets. The quarterly ABS business survey produces data by industry and by State.

Investment spending is classified into two types of assets: buildings and structures; and equipment, plant and machinery. The level of investment in these assets has a major impact on the future productive capacity of the economy.

In the Australian national accounts, the measure of fixed investment used in the expenditure based method of determining gross domestic product is referred to as gross fixed capital expenditure. This is equal to new capital expenditure plus acquisitions of second-hand assets, minus disposals of second-hand assets.

As well as collecting details of actual expenditure, the survey also collects data from businesses on expected capital expenditure for periods up to 18 months in advance.

Investment is largely a reflection of the level of business confidence about future demand. Capital expenditure may be for assets which will increase production, increase efficiency or replace old equipment.

Businesses need to take into account many factors when planning their investment. Data analysts therefore see this series as a very useful summary indicator.

Further Reading

- ☐ *Private New Capital Expenditure, Australia, Actual and Expected Expenditure* (5626.0)
  Contains estimates of actual and new capital expenditure by type of asset and selected industry.

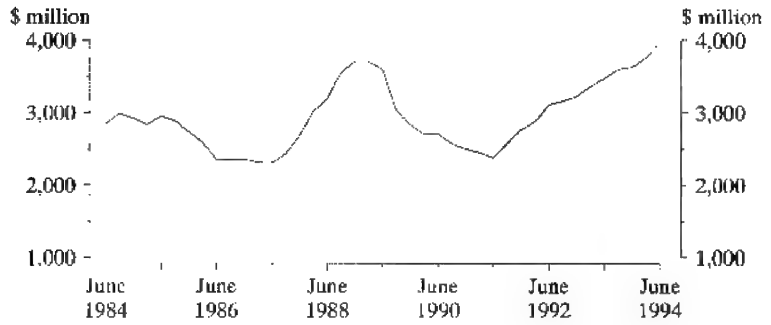
- ☐ *State Estimates of Private New Capital Expenditure* (5646.0)
  Contains a break-up by State of the Australian estimates contained in the above publication (5626.0).

2.3.5 Residential Building Construction

Comment

In seasonally adjusted constant price terms, the value of new residential building commencements increased to peak in September quarter 1984 and December 1988 and March 1989 quarters. After a rapid decline from March 1989 to June 1991 quarters, new residential building commencements increased to reach its highest level recorded of $3,970m in June quarter 1994.

VALUE OF NEW RESIDENTIAL BUILDING COMMENCEMENTS AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 8731.0, Quarterly data

RESIDENTIAL BUILDING APPROVALS AND COMMENCEMENTS, NUMBER AND VALUE AT AVERAGE 1989–90 PRICES

Period	*Number of new dwelling unit approvals*	*Value of new dwelling unit approvals ($m)*	*Number of dwelling unit commencements*	*Value of dwelling unit commencements ($m)*
		ANNUAL		
1988–89	186,358	14,793	174,963	14,554
1989–90	140,016	11,167	137,702	11,289
1990–91	126,046	10,000	121,346	9,901
1991–92	150,201	11,791	140,247	11,318
1992–93	170,557	13,872	161,605	13,213
1993–94	184,705	15,186	178,111	14,949
		QUARTERLY — SEASONALLY ADJUSTED		
1992–93—				
December	43,308	3,424	39,465	3,233
March	43,890	3,828	41,038	3,366
June	43,285	3,478	42,260	3,473
1993–94—				
September	44,799	3,654	44,024	3,603
December	45,257	3,635	42,898	3,625
March	46,002	3,802	44,727	3,759
June	48,282	4,052	46,531	3,970

(a) Seasonally adjusted data not available. Original data provided.
Sources: ABS. *Building Approvals, Australia* (8731.0) and *Building Activity, Australia* (8752.0).

Explanatory Notes

A residential building is defined as a building which is predominantly used for long-term residential purposes, and can contain one dwelling unit (i.e. house) or more than one dwelling unit (i.e. flats).

Residential building construction depends on the demand that exists for new places of residence. When the population is expanding rapidly the level of residential construction needs to be increased in order to meet the demand for new homes.

The willingness of individuals and investors to undertake residential building construction is affected by the interest rate and the economic climate. During times of economic expansion, individuals and investors are more willing to invest in residential construction than during periods of economic decline.

When construction is being financed by borrowed funds the interest rate affects the cost of investing. When interest rates are high, investors and developers need to determine whether the return on their investment will make it viable to proceed with construction. Measures of the return on their investment are house prices (for those who sell) and the level of rents (for those who rent dwellings). Other factors which affect investment are the cost of land, labour and building materials. All of these are affected by the prevailing economic climate.

Residential construction statistics are used by both government and private organisations. One of these organisations is the Indicative Planning Council for the housing industry which uses building statistics to assist in forecasting the demand and supply of new housing. The government uses the Council's forecasts as one input to determine future policy adjustments regarding residential construction or the economy in general.

The housing sector is seen to be a leading indicator of the general state of the economy. Because housing is seen as a basic requirement for all Australians, there has been a continuing demand for more houses as the population has grown. As economic conditions become more favourable, the housing sector is one of the first areas to pick up as it meets the pent-up demand which generally occurs.

Further Reading

- ☐ *Building Approvals, Australia* (8731.0)
  Contains monthly information on the number of dwelling units and the value of residential building approved for the private and public sectors.

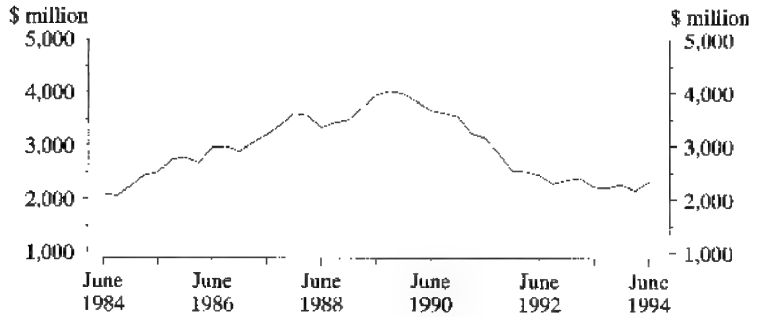
- ☐ *Building Activity, Australia* (8752.0)
  Contains quarterly data on the number of dwelling units and the value of residential buildings by private and public sector ownership for Australia and each State and Territory. Final issue: June 1994, continued by
  Building and Construction Activity, Australia (8754.0). This contains quarterly data of activity within the building and construction sectors.

2.3.6 Non-residential Building Activity

Comment

The value of non-residential building activity in seasonally adjusted constant price terms has recorded a variable movement with an underlying upward trend which peaked at $4,036m in September quarter 1989. Since then, non-residential building activity declined rapidly to $2,291m in September quarter 1992. A slower rate of decline was recorded from September quarter 1992.

VALUE OF NON-RESIDENTIAL BUILDING ACTIVITY AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 8752.0, Quarterly data

VALUE OF NON-RESIDENTIAL BUILDING ACTIVITY AT AVERAGE 1989–90 PRICES ($ million)

Period	*Private sector*	*Public sector*	*Total*
	ANNUAL		
1988–89	11,254	3,337	14,590
1989–90	12,000	3,548	15,548
1990–91	9,689	3,899	13,588
1991–92	6,945	3,441	10,386
1992–93	6,159	3,126	9,285
1993–94	5,902	3,118	9,020
	QUARTERLY — SEASONALLY ADJUSTED		
1992–93—			
December	1,613	741	2,366
March	1,506	941	2,403
June	1,487	729	2,229
1993–94—			
September	1,469	748	2,227
December	1,479	795	2,285
March	1,414	799	2,173
June	1,535	777	2,327

Source: ABS, *Construction Activity at Constant Prices, Australia* (8782.0).

Explanatory Notes

Non-residential buildings are defined as buildings other than residential buildings and include hotels, shops, factories, offices, etc. The level of non-residential building construction is an indicator of the level of investment and activity occurring in the economy. Non-residential buildings are used by businesses (both private and public) who participate in economic activity and services (hospitals, schools, etc.) which are essential for the community.

Construction of non-residential buildings varies with the demand for particular types of buildings and with the level of economic activity. While overall economic conditions generally determine whether the return on an investment will be greater than the costs of investment, the demand for particular types of buildings varies considerably.

Thus the demand for construction of new hotels depends on the perceived level of future tourism activity, the demand for factories on the state of the manufacturing industry and the demand for shops and offices on the current (over or under) supply of these buildings and some feel for future demand. The demand for construction of community and public services (hospitals, schools, etc.) tends to be more constant and more affected by government budget considerations.

Since most construction activities are funded by borrowed funds, the rate of interest could also affect the level of non-residential building construction. The interest rate is part of the cost of construction and could encourage investment in non-residential buildings when low and discourage investment when high. However, interest rates remained at a fairly high level throughout the period of growth in non-residential building, but have fallen during the 1990s. Non-residential building has also been falling in this latter period, suggesting that activity is more dependent on demand, or supply.

The level of non-residential building is used by public and private sector bodies as a measure of economic activity and an indicator of business confidence and growth.

Further Reading

- ☐ *Building Approvals, Australia* (8731.0)
  Contains monthly information on the number and value of non-residential building by class of building approved.

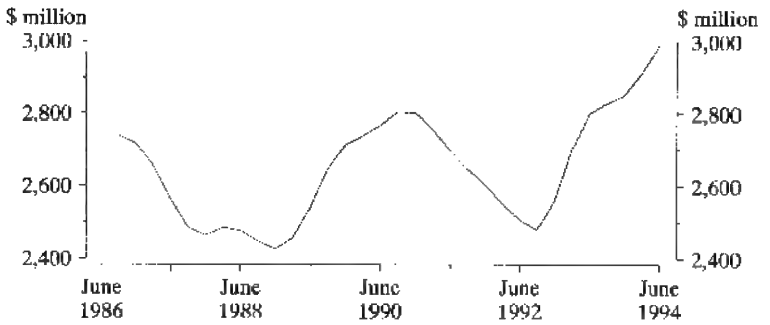
- ☐ *Building Activity, Australia* (8752.0)
  Contains quarterly data on the value of non-residential buildings by class of building by private and public sector ownership for Australia and each State and Territory. Final issue June 1994, continued by *Building and Construction Activity, Australia* (8754.0). Contains quarterly data of activity within the building and construction sectors.

2.3.7 Engineering Construction

Comment

The value of engineering construction activity in trend estimate terms increased from $2,426m in December quarter 1988 to $2,803m in September quarter 1990. Activity began to decrease again falling to $2,481m in September quarter 1992. Subsequent rapid growth saw the value of engineering construction activity rise to $2,990m in June quarter 1994, the highest estimate ever recorded since the series commenced.

ENGINEERING CONSTRUCTION ACTIVITY
VALUE OF WORK DONE AT AVERAGE 1989–90 PRICES
TREND



Source: ABS 8762.0, Quarterly data

ENGINEERING CONSTRUCTION ACTIVITY
VALUE OF WORK DONE AT AVERAGE 1989–90 PRICES
($ million)

Period	*Total for private sector*	*Total for public sector*	*Total*
	ANNUAL		
1988–89	3,011	6,787	9,798
1989–90	3,107	7,821	10,928
1990–91	2,986	8,151	11,136
1991–92	2,923	7,405	10,328
1992–93	2,750	7,898	10,648
1993–94	3,427	8,119	11,546
	QUARTERLY — TREND		
1992–93—			
December	668	1,891	2,559
March	694	2,008	2,702
June	730	2,070	2,800
1993–94—			
September	782	2,046	2,828
December	843	2,009	2,852
March	895	2,019	2,914
June	930	2,060	2,990

Source: ABS, *Australian Economic Indicators* (1350.0)

Explanatory Notes

Engineering construction can be defined as infrastructure construction. It includes construction other than buildings, e.g. roads, bridges, railways, telecommunications, water and sewerage, electricity generation and distribution facilities.

The level of engineering construction gives an indication of the economy's capability to grow and expand in the future. A modern economy needs a highly efficient infrastructure to ensure the economy can operate to its capacity and that the population is adequately serviced.

Before September 1986, data on engineering construction was limited to projects valued at $100,000 or more undertaken by private contractors only. From September 1986, the collection was expanded to include all engineering construction work undertaken by both the private and public sectors, irrespective of the value of the individual projects.

A significant proportion of engineering construction is funded by government although much of the work is contracted out to private sector firms.

The level of engineering construction does not appear to be affected by interest rates to any significant degree. Changes in the level of activity in engineering construction are a reflection of government and business commitment to increasing infrastructure.

Further Reading

- ☐ *Engineering Construction Activity, Australia* (8762.0)
  Presents the value of engineering construction work done classified by State and Territory, commodity (roads, bridges, pipelines, etc.) and sector (level of government/private) and by sector undertaking work and sector for whom the work is being done. Final issue December quarter 1994.

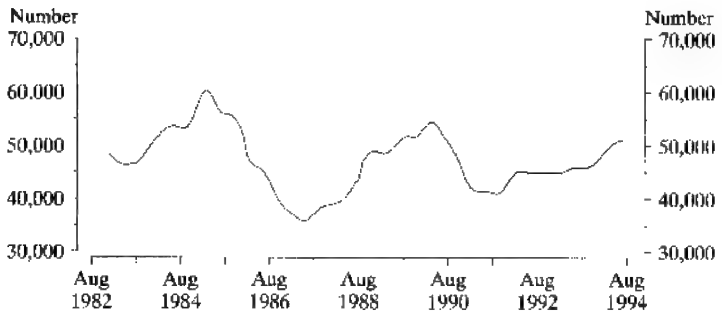
- ☐ *Construction Activity at Constant Prices, Australia* (8782.0)
  Contains general measures of activity within the building and construction sectors, including engineering construction. Data is in original and seasonally adjusted forms. Final issue September 1994, continued by
  Building and Construction Activity, Australia (8754.0). Contains quarterly data of activity within the building and construction sectors.

2.3.8 New Motor Vehicle Registrations

Comment

In trend estimate terms, new motor vehicle registrations fell steadily from a peak of 60,402 in March 1985 to a low of 35,889 in May 1987. After this there was a generally steady increase to the next peak of 54,360 in April 1990. New motor vehicle registrations then mirrored the drop in the economy in the early 1990's, before rising at the end of 1991 and levelling out from June 1992 to February 1993. Since then there has been a steady increase to 51,066 in August 1994.

NEW MOTOR VEHICLE REGISTRATIONS, TREND



Source: ABS 9303.0, Monthly data

NEW MOTOR VEHICLE REGISTRATIONS

Period	*Total vehicles (a)*
ANNUAL	
1988–89	569,221
1989–90	627,824
1990–91	542,196
1991–92	521,185
1992–93	541,505
1993–94	574,266
MONTHLY — TREND	
1992–93—	
June	45,874
1993–94—	
July	45,916
August	45,781
September	45,790
October	46,031
November	46,492
December	47,125
January	47,875
February	48,687
March	49,441
April	50,029
May	50,601
June	50,963
1994–95—	
July	51,087
August	51,066

(a) Excluding motor cycles, tractors, plant and equipment, caravans and trailers.
Source: ABS, *Registrations of New Motor Vehicles, Australia* (9303.0).

Explanatory Notes

When a new car is purchased, it is normally registered with the relevant motor vehicle registration authority. Statistics on registrations give an indication of the number of new motor vehicle sales.

A significant part of consumer spending is on buying new motor vehicles. Since consumer spending is an early indicator of trends in the economy, new motor vehicle registrations are an early indicator of the level of economic activity. During times of recession purchases of new cars fall; when the economy is booming new car purchases increase.

Both Commonwealth and State Government Treasury offices and other policy departments use registration statistics for economic planning. The statistics are also used by motor vehicle manufacturers and distributors for market research and by financial institutions in setting lending policies.

Further Reading

- ☐ *Registrations of New Motor Vehicles, Australia, Preliminary* (9301.0)
  Contains monthly registrations in each State and Territory of new passenger vehicles and other vehicles.

- ☐ *Motor Vehicle Registrations, Australia* (9303.0)
  Presents detailed information for each State and Territory on the number of registrations of new motor vehicles by vehicle type by make and selected make/model. Final issue December 1994.

- ☐ *Motor Vehicle Census: Australia* (9309.0)
  Contains data for each State and Territory for the number of vehicles on register by type of vehicle and year of manufacture, by type of vehicle and make.

- ☐ *Personal Finance, Australia* (5642.0)
  Includes finance commitments to individuals by type of lender, purpose of loan, including purchase of new motor vehicles, and State.

- ☐ *Australian Economic Indicators* (1350.0)
  See the feature article in the April 1994 issue for article '*Australia's Motor Vehicle Fleet Grows Older*'.

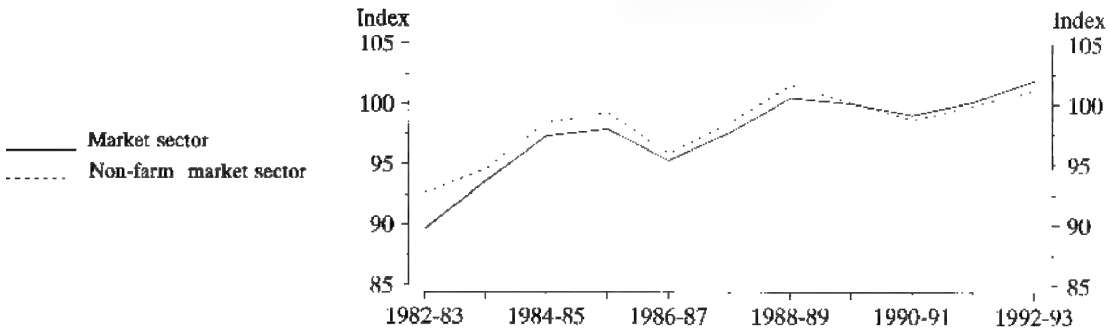
Section 2.4
Production

2.4.1 Productivity

Comment

Productivity, as measured by the multifactor productivity indexes, for the market and non-farm market sectors has generally increased since 1982–83 apart from 1986–87 and 1989–90 to 1990–91. The market and non-farm market sectors recorded very similar movements, although the index for the non-farm market index fell below the total market sector index from 1989–90.

MULTIFACTOR PRODUCTIVITY INDEXES, MARKET SECTOR AND NON-FARM MARKET SECTOR
(1989–90 = 100.0)



Source: ABS 5234.0, Annual data

PRODUCTIVITY INDEXES
(1989-90 = 100.0)

Period	*Labour – market sector (a)*	*Capital – market sector (b)*	*Multifactor – market sector (c)*	*Labour – non-farm market sector (a)*	*Capital – non-farm market sector (b)*	*Multifactor – non-farm market sector (c)*
			ANNUAL			
1986–87	96.0	93.9	95.3	96.5	94.6	95.9
1987–88	98.0	96.9	97.6	98.7	97.9	98.4
1988–89	100.7	100.1	100.5	101.9	101.0	101.6
1989–90	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	101.2	95.3	99.1	101.0	94.3	98.7
1991–92	104.1	93.6	100.2	104.0	92.4	99.9
1992–93	105.9	95.2	102.0	105.4	93.7	101.2

(a) Constant price gross product per hour worked. (b) Constant price gross product per unit of capital stock. (c) Constant price gross product per combined unit of labour and capital.
Source: ABS, *Australian National Accounts: Multifactor Productivity* (5234.0).

Explanatory Notes

Productivity is the relationship between the output of an economic unit and the inputs, such as labour and capital, which have gone into producing that output. Productivity is increased through better utilisation of resources.

Multifactor productivity (MFP) is a measure of the efficiency of the production process considering a number of inputs (factors). It is expressed as a ratio of outputs to a combined measure of two or more factor inputs (e.g. capital and labour).

The ABS measures MFP as the ratio of gross product to a combined measure of capital stock and hours worked. It includes technical progress, improvements in the work force, improvement in management practices, economies of scale and so on. It can be affected in the short to medium term by elements such as the weather and the business cycle which influence the amount produced.

Labour productivity is usually measured as the amount produced per hour worked. Quite clearly, this can be affected by technological changes and changes in other inputs (e.g. capital), as well as changes in labour efficiency.

Capital productivity is measured as the amount of output produced per unit of capital employed. Equipment, structures, land and inventories are forms of capital goods used in the production of goods and services.

Productivity measures are used by both government and private organisations to gauge the effect of changes in work practices, technology, education and training.

Further Reading

- ☐ *Australian National Accounts: Multifactor Productivity* (5234.0)
  This annual publication contains indexes of multifactor productivity for the market and non-farm market sectors. It also includes associated indexes such as labour productivity, capital productivity and the capital-labour ratio.

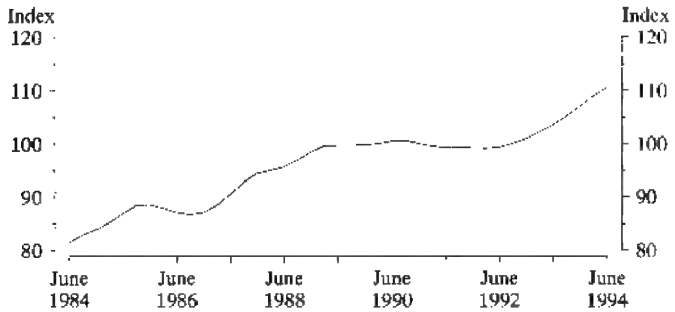
- ☐ Occasional Paper: *Estimates of Multifactor Productivity, Australia* (5233.0)
  This paper describes what the ABS indexes of multifactor productivity actually measure and provides full details of the methods used to derive them. It also examines the limitations of the indexes and attempts to quantify them. Alternative measures of MFP are described briefly.

2.4.2 Indexes of Industrial Production

Comment

The index of industrial production, in trend constant price terms, has generally increased over the 10 year period to June 1994 apart from two periods. The index decreased from 88.6 in December quarter 1985 to 86.7 in September quarter 1986 before continuing to rise to 100.6 in September quarter 1990. This was followed by a period of small quarterly decreases reaching 99.1 in March quarter 1992, before significantly increasing again.

INDEX OF TOTAL INDUSTRIAL PRODUCTION AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 8125.0, Quarterly data

INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1989–90 PRICES
(1989–90 = 100.0)

Period	*Mining (excluding services to mining)*	*Manufacturing*	*Electricity, gas and water*	*Total*
		ANNUAL		
1988–89	91.7	101.5	95.2	98.9
1989–90	100.0	100.0	100.0	100.0
1990–91	105.0	98.1	102.0	99.9
1991–92	107.1	96.4	103.5	99.3
1992–93	108.2	99.4	105.8	101.9
1993–94	109.2	107.5	107.3	107.9
		QUARTERLY — TREND		
1992–93—				
December	107.7	98.4	105.0	101.0
March	108.3	99.7	106.1	102.2
June	108.5	101.3	107.3	103.5
1993–94—				
September	108.1	103.8	107.9	105.2
December	108.2	106.7	107.9	107.1
March	110.0	109.0	108.0	109.0
June	112.9	110.4	108.1	110.5

Source: ABS, *Quarterly Indexes of Industrial Production* (8125.0).

Explanatory Notes

The indexes of industrial production provide estimates of the rises and falls in output by the mining, manufacturing and electricity, gas and water industries.

The indexes are expressed in terms of constant prices. By eliminating the effects of price increases, the change in the real volume of output from industry groups can be determined.

Analysts in the public and private sectors use the indexes to determine the level of economic activity at both an overall and broad industry level.

Where demand for products from a specific industry group increases, we would expect production to expand to meet the extra demand. The indexes reflect the growth and decline of output from specific industry groups.

Further Reading

- ☐ *Quarterly Indexes of Industrial Production, Australia* (8125.0)
  Presents indexes of gross product at constant prices for the industrial sector and each of its major component industries i.e. mining, manufacturing, electricity, gas and water. Also presents indexes for individual manufacturing subdivisions.

- ☐ *Manufacturing Production, Australia: Principal Commodities Produced* (8365.0)
  Contains statistics of the value of sales and transfers out of approximately 700 selected principal manufacturing commodities.

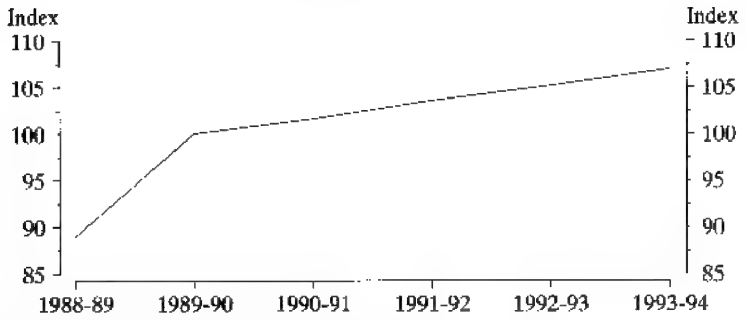
- ☐ *Manufacturing Industry, Australia* (8221.0)
  Contains annual estimates of the structure and performance of Australia's manufacturing industry.

2.4.3 Mineral Production Indexes

Comment

The index for total mineral production increased steadily between 1989–90 and 1993–94, after a strong increase in production (11 percentage points) 1988–89 to 1989–90. Production slowed in the early 1990s with production of bauxite and particularly uranium decreasing. All selected minerals increased production in 1993–94.

MINERAL PRODUCTION INDEX
(1989–90 = 100.0)



Source: Australian Mining Industry Council, Annual data

SELECTED MINERAL PRODUCTION INDEXES (1989–90 = 100.0)

Period	*Coal*	*Bauxite*	*Iron ore*	*Gold*	*Uranium*	*Total*
			ANNUAL			
1988–89	94	93	89	75	103	89
1989–90	100	100	100	100	100	100
1990–91	104	105	101	107	127	102
1991–92	111	100	105	108	106	104
1992–93	111	103	106	109	66	105
1993–94	112	104	113	114	67	107

Source: Australian Mining Industry Council (AMIC).

Explanatory Notes

Mineral production indexes give an indication of the rise and fall of the levels of output for major mine products in Australia. A rise in the indexes indicates an increase in the level of mineral production, a fall in the indexes indicates a fall in the level of mineral production.

The mining industry is an important contributor to national income and in particular to export income. Mineral resources make up approximately 8 per cent of Australia's gross domestic product and provide us with approximately 44 per cent of our export income.

The important position mining holds in the economy makes it essential for governments (Commonwealth and State) to keep track of developments in the industry. Governments are interested in the level of royalties they will receive, as well as in the export income that will be earned from mining. They are also concerned with developments in the industry for the purpose of planning services such as roads, railways, port facilities, housing, schools, etc.

Further Reading

- ☐ *Quarterly Indexes of Industrial Production* (8125.0)
  Contains indexes of gross product at constant prices for the mining industry.

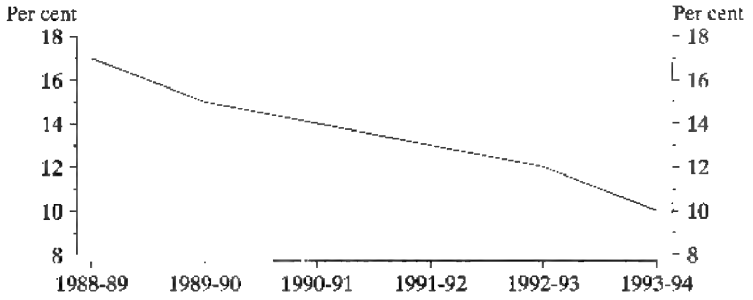
- ☐ *Mineral Production, Australia* (8405.0)
  Contains quantity and value of production of major metallic minerals, coal, oil and gas and non-metallic minerals, as well as comparative world statistics for selected minerals. Final issue 1992-93, continued by
  The Australian Mining Industry (8414.0). Provides an annual picture of the structure of the mining industry, including selected industry operating ratios and mineral production.

2.4.4 Effective Rate of Assistance

Comment

The average effective rate of assistance to the manufacturing sector by the Commonwealth Government has decreased steadily from 17% in 1988–89 to 10% in 1993–94. Conversely, net assistance to the agricultural sector increased up to 1990–91 before reducing to a rate similar to that of the manufacturing sector in 1992–93. The mining sector experienced a net cost in terms effective rate of assistance up to 1990–91, after which the sector was no longer assessed.

AVERAGE EFFECTIVE RATE OF ASSISTANCE MANUFACTURING



Source: Industry Commission Annual Report, Annual data

AVERAGE EFFECTIVE RATES OF ASSISTANCE TO SELECTED INDUSTRY SECTORS
(per cent)

Period	*Agriculture (a)*	*Manufacturing (b)*	*Mining*
	ANNUAL		
1988–89	8	17	–3.2
1989–90	7	15	–3.0
1990–91	15	14	–2.8
1991–92	12	13	n.a.
1992–93	11	12	n.a.
1993–94	n.y.a.	10	n.a.

(a) From 1989-90, the agriculture series is based on an updated cost structure and is not directly comparable with previous series.
(b) From 1989-90, the manufacturing series is based on most recently available data on materials usage from the ABS 1989-90 manufacturing census and is not comparable with previous series.
Source: Industry Commission Annual Report.

Explanatory Notes

The Industry Commission measures assistance provided to Australian industries by the Commonwealth Government.

The effective rate of assistance is an indicator of the net assistance to an industry. It is the percentage by which returns to resources (i.e. land, labour and capital) used in an industry are increased by assistance. It takes into account the assistance provided to an industry, less the extra costs the industry must pay for its inputs as a result of assistance to other industries.

The effective rate of assistance is positive if benefits provided by government to an industry outweigh costs imposed to that industry by government assistance to other industries. When the effective rate of assistance is negative, the benefits the industry receives from government assistance are outweighed by the extra costs it must pay for its inputs as a result of assistance to other industries.

The Commission's estimates of assistance include assistance provided by tariffs, quantitative import restrictions, bounties, export incentives and local content schemes and, for agricultural commodities, domestic pricing arrangements. Due to their differing impacts on particular sectors and data limitations, some other forms of assistance, such as government purchasing preferences, offset arrangements and anti-dumping procedures, are excluded from the Commission's estimates.

The Government uses the effective rate of assistance to determine how much assistance is actually provided to an industry. When the Government formulates policy on protection for an industry, it must take into account the effect that the assistance will have on other industries. Lobby groups use effective rate of assistance estimates to argue for increases or decreases in industry protection.

Further Reading

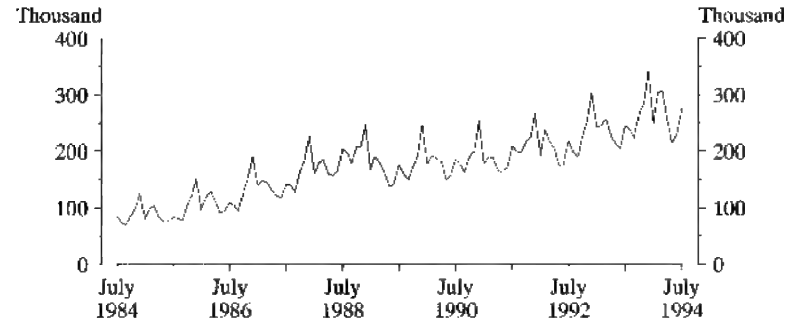
- ☐ *Industry Commission, Annual Report*
  Contains the average effective rate of assistance, analysis of recent movements, and explanatory notes.

2.4.5 Tourism

Comment

Short-term overseas visitor arrivals into Australia shows seasonal variations with an overall upward trend. The number of short-term visitor arrivals showed strong improvement during Australia's 1988 Bicentenary celebrations. The series has continued to increase reaching 344,000 visitor arrivals in December 1993.

SHORT-TERM OVERSEAS VISITOR ARRIVALS



Source: ABS 3401.0, Monthly data

TOURISM

Period	*Capacity – hotels, motels and guest houses (guest rooms) (a)(b)*	*Capacity – holiday flats, units and houses (number) (a)(b)*	*Room occupancy rates – hotels, motels and guest houses (a)(c)(%)*	*Unit occupancy rates – holiday flats, units and houses (a)(c)(%)*	*Number of short-term overseas arrivals ('000)*
			ANNUAL		
1988–89	142,662	31,012	56.0	55.7	2,220.3
1989–90	150,686	32,137	52.7	50.4	2,147.2
1990–91	158,608	32,313	50.1	48.6	2,227.4
1991–92	164,739	33,147	50.3	50.2	2,519.7
1992–93	167,006	33,775	51.7	50.9	2,785.6
1993–94	166,670	35,312	55.0	51.9	3,169.0
			MONTHLY		
1992–93—					
May	n.a.	n.a.	49.9	38.5	213.4
June	167,006	33,775	49.0	43.5	204.6
1993–94—					
July	n.a.	n.a.	52.4	55.9	244.6
August	n.a.	n.a.	52.5	53.8	239.9
September	167,018	34,459	58.6	56.1	224.0
October	n.a.	n.a.	59.6	52.9	267.2
November	n.a.	n.a.	57.3	47.7	285.9
December	166,743	35,486	49.7	52.4	344.0
January	n.a.	n.a.	54.5	72.3	250.5
February	n.a.	n.a.	55.3	48.8	304.3
March	166,262	35,410	57.8	46.4	307.4
April	n.a.	n.a.	58.6	52.0	255.1
May	n.a.	n.a.	51.2	38.2	214.9
June	166,670	35,312	52.5	45.3	230.9
1994–95—					
July	n.a.	n.a.	n.y.a.	n.y.a.	282.5

(a) From December quarter 1993, establishments with fewer than five rooms have been excluded. (b) All annual data are end of period. (c) All annual data are annual averages.
Sources: ABS, *Tourist Accommodation, Australia* (8635.0) and *Overseas Arrivals and Departures, Australia* (3401.0).

Explanatory Notes

Tourism is short-term travel away from the normal place of work and residence. This includes both domestic and international travel. Tourists spend money on a wide range of goods and services provided by many businesses.

Domestic tourism is the largest contributor to Australia's overall tourist market. When Australians holiday in Australia rather than going overseas, they spend money in Australia instead of overseas, that is Australia does not lose foreign exchange.

International tourism earns Australia foreign exchange. When tourists from overseas spend money in Australia, their currency is exchanged for Australian dollars. The foreign exchange earned from tourism can be used to finance imports and to service foreign debt.

The foreign exchange earned from tourism in Australia now exceeds earnings from many of Australia's more traditional export commodities. Tourism is seen as a growth industry which could play a role in securing Australia's future prosperity.

In order to identify the market that exists for Australia as a tourist destination, statistics on the country of residence of our international tourists are collected. This information is used to market and tailor our goods and services accordingly.

Statistics are collected on the capacity, occupancy rates and takings of tourist accommodation. The statistics are collected in order to observe the level of activity in the industry, geographical trends and seasonal trends. The information is used by government and private bodies to plan investment, marketing and policy for the tourism industry.

Further Reading

- ☐ *Directory of Tourism Statistics* (1130.0)
  Contains comprehensive information on sources of tourism statistics together with brief articles showing how each source may be used in relation to tourism.

- ☐ *Overseas Arrivals and Departures, Australia* (3402.0)
  Provides a summary of quarterly data for all movements into and out of Australia. This includes details of overseas visitors by country of residence as well as other information.

- ☐ *Tourist Accommodation, Australia* (8635.0)
  Contains quarterly data about establishments providing short-term accommodation for each State and Territory and Australia.

- ☐ *Amusement and Theme Parks, Australia* (8675.0)
  An irregular publication containing number of attractions and theme parks surveyed, number of visitors by month, employment and more.

- ☐ *Tourism Indicators, Australia* (8634.0)
  Contains quarterly data on tourist accommodation by State, details on international tourism and other tourism statistics.

- ☐ *Australian Economic Indicators* (1350.0)
  See the feature article in the December 1992 issue on 'Tourism – A Statistical Overview'.

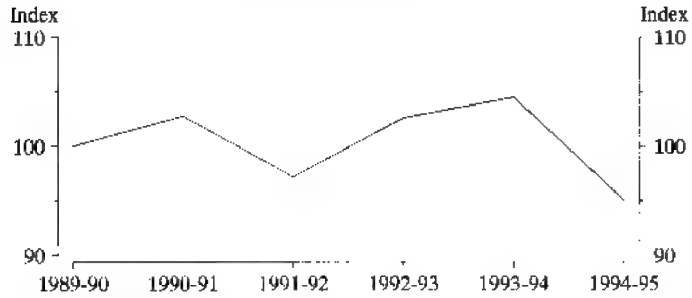
- ☐ *Hospitality Industries* (8674.0)
  Contains business size, employment, income and expenditure data as well as an historical overview of the hospitality industry.

2.4.6 Volume of Farm Production

Comment

Since 1989–90, the total volume of farm production peaked in 1990–91 and 1993–94 but is forecast to fall significantly in 1994–95 as Australia experiences one of the worst droughts in recorded history. While livestock slaughterings have continued to increase, production of livestock products has steadily fallen and production of crops is forecast to fall significantly in 1994–95.

VOLUME OF TOTAL FARM PRODUCTION INDEX
(1989–90 = 100.0)



Source: Australian Bureau of Agricultural and Resource Economics

VOLUME OF FARM PRODUCTION INDEXES
(1989–90 = 100.0)

Period	*Crops*	*Livestock slaughterings*	*Livestock products*	*Total farm*
		ANNUAL		
1989–90	100.0	100.0	100.0	100.0
1990–91	107.4	102.5	98.0	102.8
1991–92	101.3	106.1	85.8	97.2
1992–93	112.8	107.8	87.5	102.6
1993–94	118.2	109.9	85.5	104.5
1994–95 (a)	94.8	109.2	84.1	95.0

(a) ABARE forecast.
Source: Australian Bureau of Agricultural and Resource Economics (ABARE).

Explanatory Notes

A large share of Australia's total export income is generated from industries in the farm sector. The prosperity of farm industries therefore has a significant impact on incomes in the rest of the economy.

Economic performance of the farm sector can be measured by the volume of farm production, which is produced in the form of an index by the Australian Bureau of Agricultural and Resource Economics (ABARE). The farm production index is broken into three categories: crops, livestock slaughterings and livestock products. Changes in the production of farm products which make up these categories cause the index to rise or fall, depending on whether production increases or decreases.

A rise in the volume of production is not always in the best interest of the producer. When a commodity has a large share of the world market, an increase in supply causes a fall in the price of the commodity, unless demand also increases.

The majority of Australia's farm commodities do not have a large share of the world market. The quantity of these commodities exported can increase without having a significant effect on the supply of the commodity on the world market and therefore no effect on the price received.

The Government and producer groups use the volume of farm production to estimate farm incomes. This information is used to formulate policy for farm industries and the general economy.

Further Reading

- ☐ *Agriculture and Resources Quarterly*
  Contains Australian Bureau of Agricultural and Resource Economics (ABARE) forecast and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

- ☐ *Livestock and Livestock Products, Australia* (7221.0)
  Contains livestock numbers, livestock slaughterings, production of meat and dairy products, beekeeping, wool and other livestock statistics, herd sizes and the number of establishments reporting livestock. Final issue 1992-93.

- ☐ *Summary of Crops, Australia* (7330.0)
  Contains data on agricultural land use, area and production of crops and pastures, tree numbers and production of orchard fruit, area and production of other fruit and grapes and fertiliser usage. Final issue 1992–93.

- ☐ *Value of Agricultural Commodities Produced, Australia* (7503.0)
  Contains the gross and local value of agricultural commodities, average unit gross values (i.e. prices) of principle crops, livestock etc. and indexes of values at constant prices.

- ☐ *Agriculture, Australia* (7113.0)
  Covers structure of the farming sector and includes details on land use, crops, horticultural activity and livestock numbers. Also includes financial activity information.

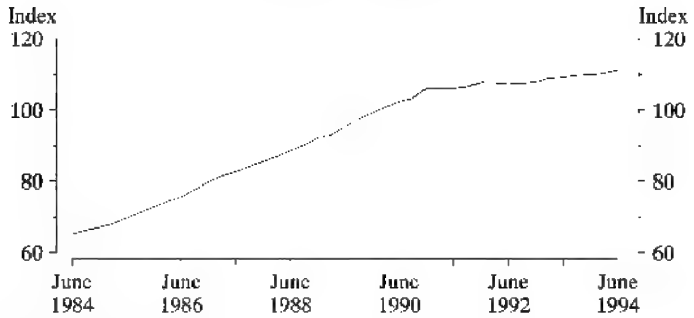
Section 2.5
Prices and Income

2.5.1 Consumer Price Index

Comment

The Consumer Price Index (CPI) has increased steadily from September quarter 1984 to December quarter 1990, except for a small decrease (0.3%) in March quarter 1984. Since December quarter 1990, the rate of growth in the CPI has slowed considerably with the all groups actually falling in March quarter 1991 (0.2%) and June quarter 1992 (0.3%).

CONSUMER PRICE INDEX: ALL GROUPS
(1989–90 = 100.0)



Source: ABS 6401.0, Quarterly data

CONSUMER PRICE INDEX: SELECTED GROUPS (a)
(1989–90 = 100.0)

Period	*Food*	*Clothing*	*Housing*	*All groups*
		ANNUAL		
1988–89	93.4	95.1	86.9	92.6
1989–90	100.0	100.0	100.0	100.0
1990–91	103.3	104.6	103.5	105.3
1991–92	105.8	106.4	98.9	107.3
1992–93	107.4	107.5	94.6	108.4
1993–94	109.4	106.7	94.2	110.4
		QUARTERLY		
1992–93—				
December	106.7	107.8	94.0	107.9
March	109.0	107.5	94.4	108.9
June	108.0	108.1	95.2	109.3
1993–94—				
September	108.8	107.1	94.9	109.8
December	109.5	106.8	93.6	110.0
March	109.8	106.3	93.7	110.4
June	109.5	106.4	94.4	111.2

(a) Weighted average of eight capital cities.
Source: ABS, *Consumer Price Index* (6401.0).

Explanatory Notes

The Consumer Price Index (CPI) is a general indicator of the rate of change in prices paid by household consumers for the goods and services they buy. The simplest way of thinking about the CPI is to imagine a *basket of goods and services* of the kind bought by Australian households. As prices vary, the total price of this basket will also vary.

This basket of goods and services has been selected to represent purchases by metropolitan employee households and covers expenditure on the following broad items: food, clothing, housing, household equipment and operation, transportation, tobacco and alcohol, health and personal care as well as recreation and education. To ensure the basket remains representative of current spending habits, it is revised every 5 years.

The price of the CPI basket in the base period (currently 1989–90) is assigned a value of 100.0 and prices in other periods are expressed as percentages of the price in the base period. For example, if the price of the basket had increased by 15 per cent since the base period the CPI would read 115.0.

The actual index number for any given period is therefore equal to:

$$\frac{\text{total cost of fixed basket in given period}}{\text{total cost of fixed basket in reference base period}} \times 100$$

The CPI has always been an important economic indicator and in recent years actions related to movements in the CPI have had direct or indirect effects on all Australians. For example, it has been used as a starting point in wage negotiations, to adjust Social Security and superannuation payments and in a range of business contracts.

The CPI is often loosely referred to as a 'cost of living index' but strictly speaking this is not correct. A true cost of living index, among other things, would need to take into account changes in standards of living and the substitutions that consumers make in order to maintain their standard of living in the face of changing market conditions (for instance, buying chicken instead of beef when beef prices are high). In contrast, the CPI assumes the purchase of a constant basket of goods and services and measures changes in the price of the goods and services in that basket alone.

Further Reading

- ☐ *Consumer Price Index* (6401.0)
  Presents quarterly movements in retail prices of goods and services commonly purchased by metropolitan wage and salary earners. Indexes are published for each of the State capitals, Canberra and Darwin.

- ☐ *A Guide to the Consumer Price Index* (6440.0)
  Contains information designed to promote the understanding of the CPI among general users.

- ☐ Information Paper: *The Australian Consumer Price Index 12th Series Review* (6450.0)
  Presents the results of the latest in a series of periodic reviews of the CPI.

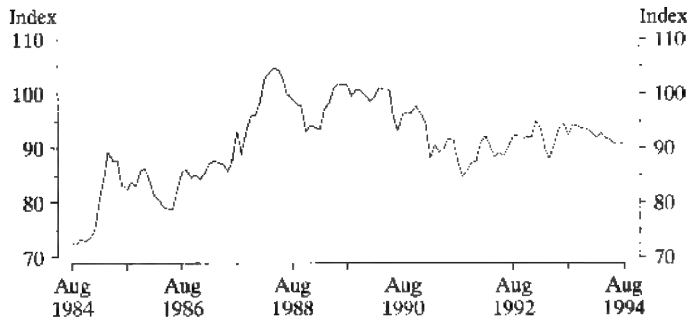
- ☐ *The Australian Consumer Price Index: Concepts, Sources and Methods* (6461.0)
  Contains a comprehensive description of the Australian Consumer Price Index.

2.5.2 RBA Commodity Price Index

Comment

The RBA index of commodity prices increased from 72.5 in August 1984 to 104.6 in April 1988 reflecting the increase in prices received for Australia's exports. Since then, the series decreased to 84.9 in September 1991 and this was followed by two years of fluctuations until August 1994.

RBA INDEX OF COMMODITY PRICES
(1989–90 = 100.0)



Source: Reserve Bank of Australia Bulletin, Monthly data

RBA INDEX OF COMMODITY PRICES
(1989–90 = 100.0)

Period	*All items*
ANNUAL AVERAGE	
1988–89	97.3
1989–90	100.0
1990–91	93.3
1991–92	88.6
1992–93	91.8
1993–94	92.7
MONTHLY	
1992–93—	
June	93.7
1993–94—	
July	94.5
August	92.4
September	94.3
October	94.1
November	93.6
December	93.5
January	92.9
February	91.9
March	92.7
April	90.7
May	90.6
June	91.0
1994–95—	
July	91.9
August	91.6

Source: RBA, *Reserve Bank of Australia Bulletin.*

Explanatory Notes

The Reserve Bank of Australia (RBA) developed the commodity price index to provide an early indication of trends in Australia's export prices. There are 19 commodities included in the index representing approximately two-thirds of Australia's commodity exports and just over half of total merchandise exports. The commodities are weighted according to their share of exports by volume over the previous 12 months. The weights given to each commodity can vary over time to allow for changes in the composition of exports.

Rural and non-rural components are calculated as well as total commodities. Rural commodities make up approximately one-third of the index, with wool, wheat and beef being the main rural commodities. Non-rural commodities make up the rest of the index, with coking and steaming coal, iron ore and gold being the main non-rural commodities.

The Government and private enterprise use the RBA commodity price index to predict Australia's export earnings and future economic prospects.

Further Reading

- ☐ *Reserve Bank of Australia Bulletin*
  Presents monthly estimates for the Reserve Bank of Australia commodity price index for rural, non-rural and all items. See articles in the December 1987 and February 1989 issues for explanations of the index.

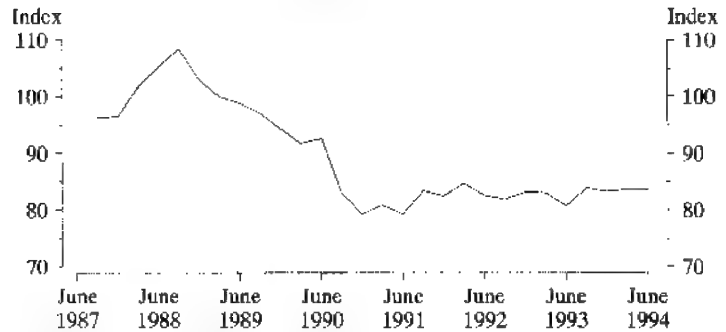
- ☐ *Reserve Bank of Australia Index of Commodity Prices*
  Monthly Reserve Bank of Australia press release containing the commodity price index.

2.5.3 Prices Received and Paid by Farmers

Comment

Between September quarter 1988 and December quarter 1990, the gap between prices received by farmers and prices paid by farmers widened considerably, resulting in a sharp decline in farmers' terms of trade. Between September quarter 1991 and June quarter 1994, the farmers' terms of trade stabilised, fluctuating within a band of 4 index points.

FARMERS' TERMS OF TRADE INDEX
(1987-88 = 100.0)



Source: Australian Bureau of Agricultural and Resource Economics

INDEXES OF PRICES RECEIVED AND PAID BY FARMERS
(1987–88 = 100.0)

Period	*Prices received*	*Prices paid*	*Farmers' terms of trade (a)*
	ANNUAL		
1988–89	111.8	109.0	102.5
1989–90	109.1	116.2	93.9
1990–91	94.8	117.6	80.6
1991–92	98.3	117.4	83.7
1992–93	96.3	116.8	82.4
1993–94	100.1	119.8	83.6
	QUARTERLY		
1992–93—			
December	97.0	116.6	83.2
March	97.5	117.3	83.1
June	94.7	117.1	80.8
1993–94—			
September	99.7	119.0	83.8
December	99.6	119.5	83.3
March	100.5	120.3	83.6
June	100.7	120.4	83.6

(a) Ratio of index of prices received by farmers and index of prices paid by farmers.
Source: ABARE, *Indexes of Prices Received and Paid by Farmers, Australian Bureau of Agricultural and Resource Economics.*

Explanatory Notes

The Australian Bureau of Agricultural and Resource Economics (ABARE) produces indexes of prices received and prices paid by farmers. The indexes measure movements in the price of fixed baskets of goods and services that farmers sell and purchase, respectively.

The indexes of prices received and paid by farmers are not indicators of farmers' incomes or costs, but are used to determine farmers' terms of trade. Farmers' terms of trade is equal to the ratio of prices received to prices paid. Farmers experience a rise in their terms of trade when the prices they receive increase, and the prices they pay remain constant or fall. Farmers experience a fall in their terms of trade when the prices they pay increase, and the prices they receive fall or remain constant.

ABARE uses farmers' terms of trade along with other information to assist in the projection of income levels for producers of specific commodities. The Government uses the forecasts to formulate economic policy regarding marketing of primary products, guaranteed prices, subsidies to primary producers and overseas trade policy.

Further Reading

- *Indexes of Prices Received and Paid by Farmers*
  Contains Australian Bureau of Agricultural and Resource Economics (ABARE) quarterly indexes of the prices received and paid by farmers, at the Australian and State level, as well as explanatory notes on the indexes themselves.

- *Agriculture and Resources Quarterly*
  Contains Australian Bureau of Agricultural and Resource Economics (ABARE) forecast and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

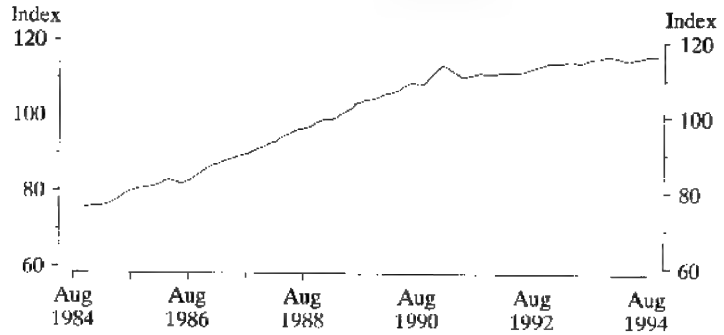
- *Agricultural Industries, Financial Statistics, Australia* (7507.0)
  Contains detailed information for farm businesses about income, expenses, profitability, capital spending, asset values, indebtedness and net worth. The information is available for individual agricultural industries at the State and national levels.

2.5.4 Producer Price Indexes

Comment

The price index of articles produced by the manufacturing industry displayed steady growth during the 1980s. A slower rate of growth was recorded in the 1990s with the exception of the period from June 1990 to November 1990 which recorded an increase of 5.2 index points.

PRICE INDEX OF ARTICLES PRODUCED BY THE MANUFACTURING INDUSTRY (1988–89 = 100.0)



Source: ABS 6412.0, Monthly data

SELECTED PRODUCER PRICE INDEXES: ALL GROUPS

Period	*Price index of materials used in building (other than house building) (a)*	*Price index of materials used in house building (b)*	*Price index of materials used in manufacturing (c)*	*Price index of articles produced by manufacturing (d)*
		ANNUAL AVERAGES		
1988–89	92.7	126.1	113.1	100.0
1989–90	100.0	135.8	119.0	106.5
1990–91	105.1	142.1	123.8	111.2
1991–92	105.7	142.4	120.7	111.6
1992–93	106.0	145.2	126.6	114.3
1993–94	107.5	152.1	124.6	115.5
		MONTHLY		
1992–93—				
June	106.6	148.8	127.2	115.3
1993–94—				
July	106.9	149.9	127.2	115.5
August	106.9	150.2	127.1	115.4
September	107.2	150.9	128.1	116.0
October	107.2	151.4	127.6	115.9
November	107.2	151.6	126.0	115.8
December	107.2	151.9	124.0	115.4
January	107.2	152.3	122.7	115.0
February	107.4	152.6	121.7	114.8
March	107.8	153.1	122.0	115.2
April	108.2	153.6	121.7	115.5
May	108.4	153.8	123.2	115.8
June	108.6	154.3	124.0	116.1
1994–95—				
July	109.1	154.5	125.1	116.2
August	109.2	155.0	125.6	116.2

(a) Base year 1989–90 = 100.0 (b) Base year 1985–86 = 100.0 (c) Base year 1984–85 = 100.0 (d) Base year 1988–89 = 100.0.
Sources: ABS, *Price Index of Materials Used in Building, Other than House Building, Six State Capital Cities and Canberra* (6407.0), *Price Index of Materials Used in House Building, Six State Capital Cities and Canberra* (6408.0), *Price Index of Articles Produced by Manufacturing Industry, Australia* (6412.0) and *Price Indexes of Materials used in Manufacturing Industries, Australia* (6411.0).

Explanatory Notes

Producer price indexes measure movements in the prices of goods for various sectors of the Australian economy. They are important economic indicators.

The indexes relate to three broad sectors of the Australian economy; building industry, manufacturing industry and the coal mining industry. The producer price indexes measure changes in prices of materials used in the production processes for each of the sectors, as well as articles produced by the manufacturing sector.

Most of the prices used in the indexes are collected as at the mid-point of each month. They reflect, as far as possible, actual transaction prices, including all forms of discounting.

The indexes are used by both the public and private sectors, primarily for adjusting business contracts, as well as for economic analysis.

Further Reading

- ☐ *Price Index of Materials Used in Building Other than House Building, Six State Capital Cities and Canberra* (6407.0)
  Contains measurements of monthly price movements of materials delivered on site for use in the construction of buildings other than houses.

- ☐ *Price Index of Materials Used in House Building, Six State Capital Cities and Canberra* (6408.0)
  Contains measurements of monthly price movements of materials delivered on site for use in the construction of houses.

- ☐ *Price Indexes of Copper Materials, Australia* (6410.0)
  Presents indexes which measure price movements in copper materials used in the manufacture of electrical equipment.

- ☐ *Price Indexes of Materials Used in Manufacturing Industries, Australia* (6411.0)
  Contains indexes which measure the price movements of materials and fuels used by establishments engaged in manufacturing.

- ☐ *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0)
  Contains indexes which measure the price movements of articles produced by establishments engaged in manufacturing.

- ☐ *Price Indexes of Materials Used in Coal Mining, Australia* (6415.0)
  Contains measurements of price movements of materials used in the mining of coal, for underground mining and open-cut mining.

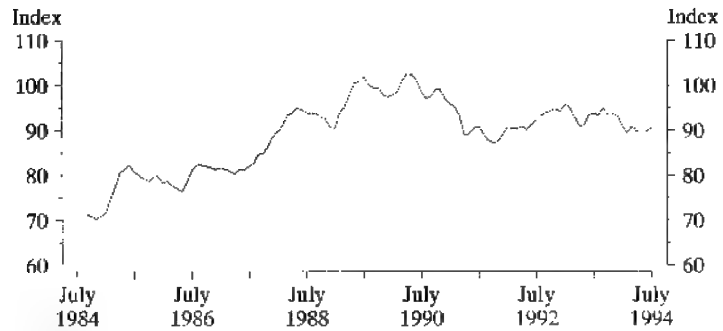
- ☐ *Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods* (6419.0)
  Provides a comprehensive description of the producer price indexes.

2.5.5 Foreign Trade Price Indexes

Comment

The movement in the export price index has been variable with an overall upward trend until the beginning of the 1990s, peaking at 102.5 in April 1990. The index then fell to 87.3 in October 1991, recovered to 95.7 in January 1993 and has since fluctuated around a slightly lower level.

EXPORT PRICE INDEX
(1989–90 = 100.0)



Source: ABS 6405.0, Monthly data

FOREIGN TRADE PRICE INDEXES: ALL GROUPS (1989–90 = 100.0)

Period	*Export price index*	*Import price index*
	ANNUAL	
1988–89	100.9	98.2
1989–90	101.2	99.8
1990–91	90.5	102.5
1991–92	91.2	104.9
1992–93	93.3	116.8
1993–94	89.8	112.6
	MONTHLY	
1992–93—		
May	91.3	113.8
June	93.3	116.8
1993–94—		
July	93.7	116.9
August	93.2	116.7
September	94.8	119.3
October	93.4	118.9
November	93.5	118.2
December	93.1	117.1
January	90.9	114.4
February	89.4	112.9
March	90.9	113.3
April	89.8	113.1
May	89.6	113.3
June	89.8	112.6
1994–95—		
July	90.6	113.7

Sources: ABS, *Export Price Index, Australia* (6405.0) and *Import Price Index, Australia* (6414.0).

Explanatory Notes

Foreign trade price indexes measure the price of goods leaving and entering Australia. There are two foreign trade price indexes, the export price index and the import price index.

The export price index measures changes in the prices of exports of merchandise from Australia. The import price index measures changes in prices of imports of merchandise into Australia.

In general, prices are obtained from major exporters and importers of the selected commodities included in each index. The prices used in the indexes relate to the month in which the goods physically leave and enter Australia. They are collected on a free on board (f.o.b.) basis. Freight and insurance charges involved in shipping the goods to and from Australian ports are excluded.

The prices used in both the export and import indexes are expressed in Australian dollars. For this reason changes in the relative value of the Australian dollar against overseas currencies will affect both price indexes. An appreciation of the Australian dollar has a downward influence on both indexes, while a depreciation has an upward influence.

The indexes are used by both the public and private sectors for both economic analysis and adjusting business contracts. The indexes are also used as input into other ABS statistics, such as constant price estimates of the national accounts.

Further Reading

- ☐ *Export Price Index, Australia* (6405.0)
  Measures changes in free on board Australian port-of-origin prices of merchandise exports.

- ☐ *Import Price Index, Australia* (6414.0)
  Measures changes in free on board country-of-origin prices for imports of merchandise into Australia.

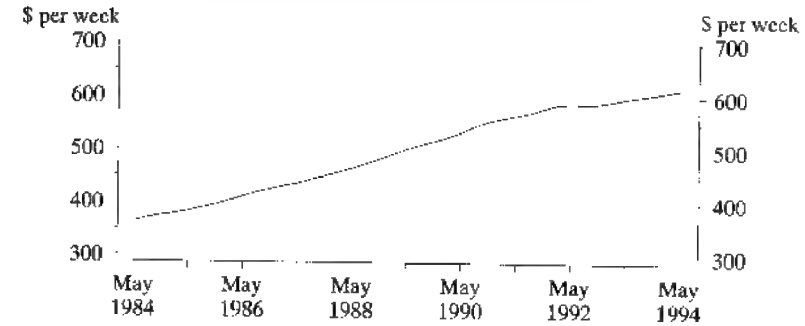
- ☐ *Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods* (6419.0)
  Provides a comprehensive description of the foreign trade price indexes.

2.5.6 Average Weekly Earnings

Comment

Average weekly ordinary time earnings, for full time adults, showed relatively constant growth during the 1980s. From 1984 to May 1994, average weekly earnings increased at an average annual growth rate of 5.4%. Growth slowed from 1990 to 1994, particularly over 1992–93 when average weekly earnings decreased in August quarter 1992.

FULL-TIME ADULT AVERAGE WEEKLY ORDINARY TIME EARNINGS – PERSONS, TREND



Source: ABS 6302.0, Quarterly data

FULL-TIME ADULT AVERAGE WEEKLY ORDINARY TIME EARNINGS
($ per week)

Period	*Males*	*Females*	*Persons*
	ANNUAL AVERAGE (a)		
1988–89	515.70	428.48	487.30
1989–90	552.18	458.28	520.95
1990–91	588.25	491.38	555.40
1991–92	615.43	516.20	580.75
1992–93	627.15	525.75	591.03
1993–94	645.95	542.78	609.10
	QUARTERLY — TREND		
1992–93—			
November	624.40	522.60	588.00
February	627.60	527.30	592.00
May	633.50	532.60	597.70
1993–94—			
August	638.80	536.20	602.40
November	642.90	539.50	606.10
February	647.30	544.30	610.60
May	652.60	550.40	616.00

(a) Derived as annual average of average weekly earnings in the specified pay period in each quarter.
Source: ABS, *Average Weekly Earnings, States and Australia* (6302.0).

Explanatory Notes

The ABS collects information from approximately 5,000 employers every quarter to determine estimates of average weekly earnings. Employers are asked to provide details of the total gross weekly earnings paid to employees (including weekly overtime earnings) and the number of employees involved (split into full-time adults and all other employees, by males and females).

The most obvious change in average weekly earnings occurs when wages have increased or decreased as a result of National Wage increases, or agreements between employers and employees, or because of changes to award conditions.

A change in average weekly earnings is not necessarily a reflection of changes in wages but may be due to changes in the composition of the wage and salary earner segment of the labour force. Changes in the type of employment (part-time, full-time), the age of the workforce, the occupational make-up of the workforce and the amount of overtime all affect average weekly earnings.

If average weekly earnings increase while the level of employment and composition of the wages and salary segment of the labour force remain the same, expenditure on wages rises. If the increase in expenditure on wages is not accompanied by an increase in production, labour costs per unit of output produced will rise.

Governments, unions, employer groups, researchers and private bodies use average weekly earnings as a guide to changes in the labour market, and as an indicator of the level of economic activity. Average weekly ordinary time earnings is used in some contracts to adjust for increases in labour costs.

Further Reading

- ☐ *Average Weekly Earnings, States and Australia* (6302.0)
  Contains quarterly estimates of average weekly ordinary time earnings and average weekly total earnings for full-time adult employees and average weekly total earnings for all employees, males, females and persons, classified by sector and State and Territory, by sex.

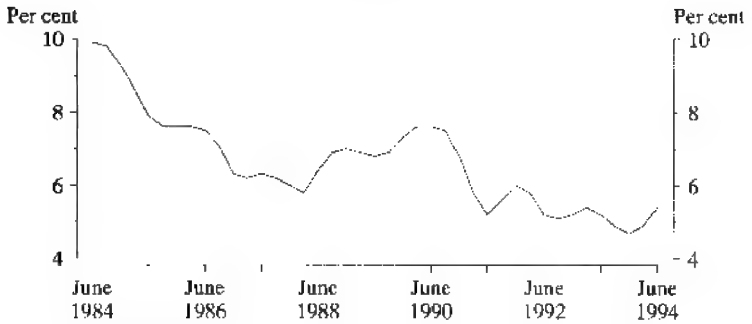
- ☐ *Average Weekly Earnings* (6350.0)
  Contains an historical series of average weekly earnings for all males for Australia from September quarter 1941 to November 1990, as well as average weekly earnings estimates for all employees from September quarter 1981, classified into a number of categories.

2.5.7 Saving

Comment

The household saving ratio in trend estimate terms has generally fallen, continuing a downward trend from 15.6% in December quarter 1974. Slight improvements were experienced when the ratio reached 9.9% in June quarter 1984 and 7.6% in March quarter 1990, however the household saving ratio reached its lowest level recorded of 4.7% in December quarter 1994.

HOUSEHOLD SAVING RATIO, TREND



Source: ABS 5206.0, Quarterly data

HOUSEHOLD SAVING

Period	*Saving (a) ($m)*	*Household disposable income ($m)*	*Household saving ratio (%)*
	ANNUAL		
1988–89	14,598	210,146	6.9
1989–90	16,011	233,828	6.8
1990–91	14,624	245,699	6.0
1991–92	14,552	257,111	5.7
1992–93	14,421	267,311	5.4
1993–94	14,878	279,113	5.3
	QUARTERLY — TREND		
1992–93—			
December	3,451	66,419	5.2
March	3,615	67,096	5.4
June	3,500	67,504	5.2
1993–94—			
September	3,331	68,094	4.9
December	3,255	68,965	4.7
March	3,456	70,105	4.9
June	3,818	71,336	5.4

(a) Savings is derived as a balancing item.
Source: ABS, *Australian National Accounts: National Income and Expenditure* (5206.0).

Explanatory Notes

Saving is the excess of income over outlays for each sector in the economy during a given period. Saving can be seen as giving up current consumption to derive a future benefit because it is used to finance investment which, at the national level, will increase the productive capacity to produce a greater quantity of goods and services in the future.

Household disposable income is the amount of income that households have available for spending after deducting from total income any taxes paid, interest payments and transfers to overseas. The ratio of household income saved to household disposable income is called the household saving ratio. Australia's household saving ratio has generally been on a downward trend since reaching a high point in the mid 1970s.

For businesses, saving is referred to as undistributed income or retained earnings. For governments, saving is referred to as the surplus on current transactions.

If total saving in the domestic economy from the above sources and from depreciation allowances (sometimes referred to as 'consumption of fixed capital') is not enough to cover planned investment, then the nation must borrow from foreign countries to finance its investment. Historically, Australia has relied heavily on foreign borrowing to finance its investment. In effect, we have chosen to consume now rather than to save for investment.

Governments and private organisations are interested in changes in the level of saving because of the effect on investment and Australia's borrowing requirements from overseas.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data, including household income and expenditure, for the last 13 quarters. Measures of national saving and saving for individual institutional sector (government, businesses and households) are derived as balancing items in the income and outlay accounts of the national accounts.

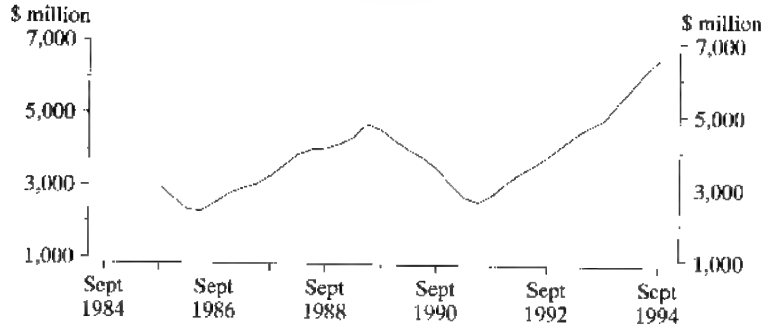
- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5204.0)
  Contains annual data, including household income and expenditure, from 1959–60.

2.5.8 Company Profits

Comment

Company profits in trend estimate terms rose to $4,640m in June quarter 1989 after a period of strong growth. Following the 1988 stock market crash, company profits fell sharply to $2,563m in June quarter 1991 but have since far exceeded 1989 levels recording $7681m in June quarter 1994.

COMPANY PROFITS BEFORE TAX, TREND



Source: ABS 5651.0, Quarterly data

COMPANY PROFITS BEFORE INCOME TAX (a)
($ million)

Period	*Mining*	*Manufacturing*	*Wholesale and retail trade*	*Other selected industries*	*Total*
		ANNUAL			
1988–89	3,540	8,695	3,472	1,611	17,318
1989–90	4,947	8,159	2,864	542	16,512
1990–91	5,930	4,866	1,882	–368	12,310
1991–92	5,048	5,746	1,905	176	12,875
1992–93	5,268	7,983	2,822	911	16,984
1993–94	4,827	10,655	3,590	2,617	21,689
		QUARTERLY — TREND			
1992–93—					
March	1,302	2,105	764	278	4,449
June	1,316	2,231	753	360	4,660
1993–94—					
September	1,303	2,372	744	452	4,871
December	1,209	2,591	823	691	5,314
March	1,168	2,810	1,017	727	5,722
June	1,192	2,967	1,219	794	6,172
1994–95—					
September	1,249	3,050	1,369	886	6,554

(a) Excluding public sector and unincorporated sector. Also excluding companies with 30 employees or fewer and all companies classified to agriculture, forestry, fishing, hunting, banking, non-bank finance, insurance, unit trusts, land trusts, mutual funds and community services.

Source: ABS, *Company Profits, Australia* (5651.0).

Explanatory Notes

Company profits are defined as net operating profits or losses before income tax.

Statistics on company profits are collected quarterly by broad industry. Also collected in the survey of company profits are depreciation of fixed assets and interest paid and received. Industries included are mining, manufacturing, wholesale and retail trade and other selected industries which include construction, transport and storage, services to finance and insurance and property and business services. Companies excluded are those primarily engaged in agriculture, forestry, fishing and hunting, banking, non-bank finance, unit trusts, land trusts, mutual funds, insurance and community services activities.

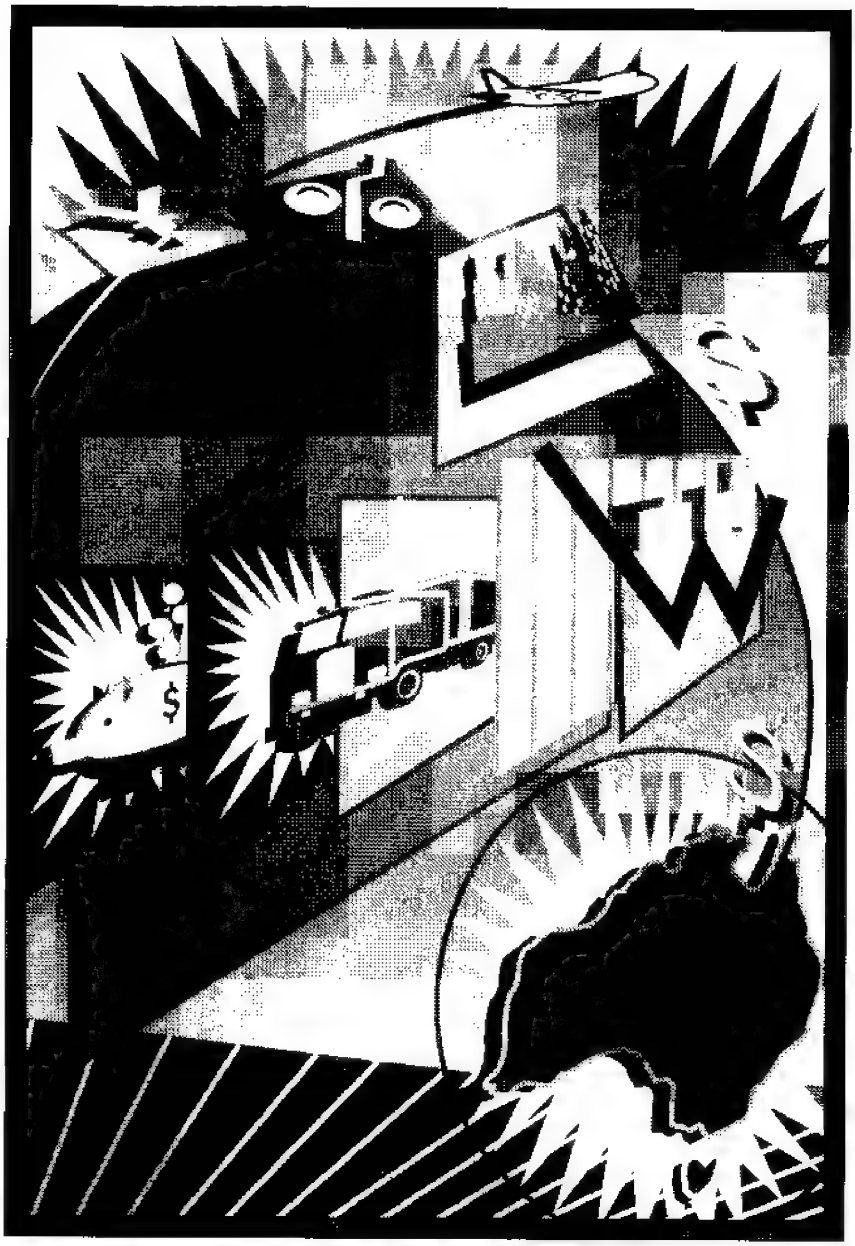
The data relate to companies employing more than 30 people. Smaller companies are excluded because they account for only about 10 per cent of total profits.

The Government and private bodies use statistics on company profits as a short-term indicator of economic activity. During periods of economic growth we expect a higher level of company profits than in periods of economic decline.

Further Reading

- ☐ *Company Profits, Australia* (5651.0)
  Contains quarterly estimates of company profits of selected incorporated business enterprises. The data are presented by industry and expressed in original, seasonally adjusted and trend terms.

- ☐ *Business Operations and Industry Performance, Australia* (8140.0)
  Presents economic statistics based on profit and loss statements and balance sheet accounts of businesses in all industries of the Australian economy. Included is a measure of net profit and profitability.



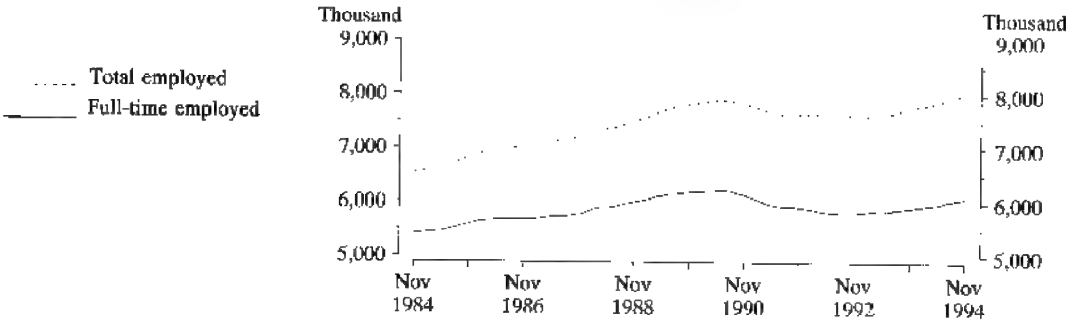
Section 2.6
Labour Force and Demography

2.6.1 Employment

Comment

The trend estimate of the number of both full-time and total workers rose steadily in the late 1980s to reach 6.2 million and 7.9 million persons, respectively, in June 1990. Since then, full-time employment fell to 5.8 million and 7.6 million persons, respectively, in September 1992 before full-time employed persons increased to 6.1 million persons and total employed increased to 8.0 million persons in November 1994, marginally higher than the June 1990 peak.

FULL-TIME EMPLOYED PERSONS, TREND



Source: ABS 6203.0, Monthly data

EMPLOYED PERSONS ('000)

Period	*Full-time aged 15-19 years*	*Full-time aged 20+ years*	*Total full-time*	*Total part-time*	*Total*
			ANNUAL AVERAGE		
1988–89	445.2	5,588.1	6,033.3	1,515.4	7,548.7
1989–90	434.9	5,757.4	6,192.2	1,639.7	7,832.0
1990–91	356.8	5,736.5	6,093.3	1,689.1	7,782.4
1991–92	271.6	5,613.0	5,884.6	1,752.2	7,636.7
1992–93	247.4	5,589.8	5,837.2	1,796.8	7,633.9
1993–94	231.9	5,697.4	5,929.3	1,851.3	7,780.6
			MONTHLY — TREND		
1993–94—					
September	232.6	5,652.8	5,885.4	1,824.4	7,709.7
October	232.2	5,666.3	5,898.4	1,837.6	7,736.1
November	232.6	5,680.3	5,912.9	1,848.5	7,761.4
December	233.0	5,693.8	5,926.8	1,857.8	7,784.6
January	232.4	5,705.6	5,938.0	1,863.9	7,801.8
February	231.0	5,716.1	5,947.2	1,868.1	7,815.2
March	230.0	5,726.4	5,956.5	1,871.9	7,828.4
April	230.4	5,739.0	5,969.4	1,876.7	7,846.1
May	232.3	5,754.3	5,986.6	1,883.3	7,869.9
June	235.2	5,771.3	6,006.5	1,892.6	7,899.2
1994–95—					
July	238.4	5,788.4	6,026.8	1,903.8	7,930.5
August	241.1	5,804.8	6,045.8	1,914.6	7,960.4
September	243.0	5,819.6	6,062.6	1,924.1	7,986.7
October	244.3	5,832.4	6,076.7	1,932.2	8,008.9
November	245.5	5,841.6	6,087.1	1,938.5	8,025.6

Source: ABS, *The Labour Force, Australia* (6203.0).

Explanatory Notes

Each month the ABS collects data on the number of employed and unemployed persons. This information is gathered from the Labour Force Survey, a monthly sample survey of private dwellings and non-private dwellings (e.g. hotels, motels).

The survey is used to determine the labour force status of the civilian population aged 15 years and over. Not included are members of the permanent defence forces, diplomatic and defence personnel from overseas countries and overseas residents in Australia. The Labour Force Survey classifies individuals as employed, unemployed or not in the labour force.

Employed persons are persons aged 15 years and over, who during the reference week, (a) worked one hour or more for payment of any kind or profit in a job, business or farm or (b) worked one hour or more without pay in a family business or farm or (c) were employees who had a job but were not at work for various defined reasons or (d) were employers, self-employed persons or unpaid family helpers who had a job but were not at work. Full-time workers are employed persons who usually work more than 35 hours a week or did so during the reference week.

Estimates of employment and unemployment are primarily indicators of economic activity and, as such, are used by government departments, financial markets, industry organisations and research organisations to monitor the economy's performance and to develop economic policy. However, employment and particularly unemployment are also social indicators and are used by government departments, research organisations and welfare organisations as indicators of social conditions.

Further Reading

- ☐ *Labour Statistics, Australia* (6101.0)
  Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

- ☐ *The Labour Force, Australia* (6203.0)
  Contains estimates of the civilian population aged 15 and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

- ☐ *Information Paper: Measuring Employment and Unemployment* (6279.0)
  Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

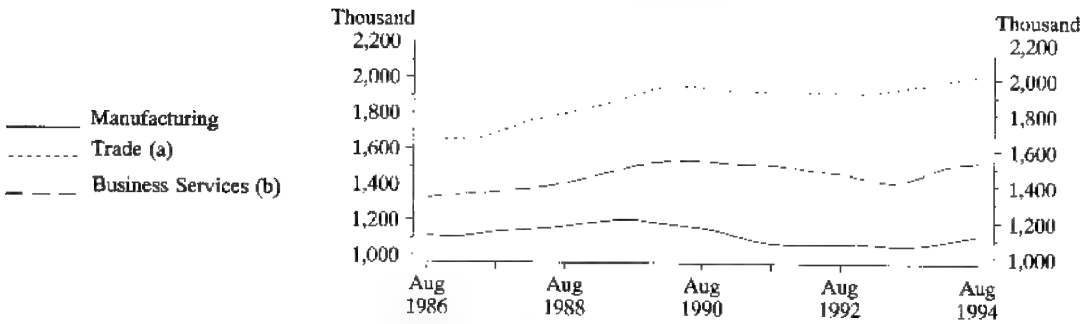
- ☐ *Australian Economic Indicators* (1350.0)
  See feature article *Labour Force Projections to 2011* in the October 1994 issue.

2.6.2 Employed Persons by Industry

Comment

Over the last decade, in trend estimate terms, employment in Agriculture, Forestry and Fishing, Mining and Manufacturing either declined or remained static while employment in Trade, Business Services and Community Services increased. From August 1986 to August 1994, average rates of growth in employment were: Agriculture, Forestry and Fishing -0.5%, Mining -1.7%, Manufacturing 0.2%, Trade 2.6%, Business Services 2.1% and Community Services 3.0%.

EMPLOYED PERSONS BY SELECTED INDUSTRIES, TREND



Source: ABS 6203.0, Quarterly data

EMPLOYED PERSONS BY SELECTED INDUSTRIES ('000)

Period	*Agriculture, Forestry and Fishing*	*Mining*	*Manufacturing*	*Trade (a)*	*Business Services (b)*	*Community Services (c)*
			ANNUAL AVERAGE			
1988–89	435.5	97.9	1,189.6	1,836.8	1,444.2	1,032.5
1989–90	429.0	103.9	1,189.3	1,942.8	1,525.2	1,055.0
1990–91	435.4	95.0	1,131.3	1,933.9	1,525.8	1,078.2
1991–92	408.6	89.6	1,074.1	1,925.3	1,495.6	1,124.2
1992–93	404.6	86.8	1,074.1	1,931.5	1,444.3	1,115.4
1993–94	409.2	89.4	1,082.1	1,975.1	1,485.2	1,141.7
			QUARTERLY — TREND			
1992–93—						
February	406.5	85.1	1,073.0	1,927.7	1,430.2	1,105.1
May	406.6	87.8	1,065.8	1,941.7	1,420.2	1,105.6
1993–94—						
August	408.3	90.9	1,064.8	1,955.5	1,437.7	1,120.5
November	408.7	90.9	1,073.6	1,965.8	1,473.6	1,136.2
February	407.4	88.7	1,089.2	1,983.8	1,505.8	1,149.9
May	406.2	87.2	1,107.0	2,004.4	1,525.9	1,161.7
1994–95—						
August	408.8	86.2	1,123.7	2,021.9	1,536.7	1,171.0

(a) Trade includes Wholesale Trade, Retail Trade and Accommodation, Cafes and Restaurants. (b) Business Services includes Transport and Storage, Communication Services, Finance and Insurance and Property and Business Services. (c) Community Services includes Health and Community Services, Cultural and Recreational Services and Personal and Other Services.
Source: ABS, *The Labour Force, Australia* (6203.0).

Explanatory Notes

Statistics are collected on the number of people employed by industry as at the mid-month of each quarter. The information is collected through the Labour Force Survey, and is used to determine trends in the labour market.

The Labour Force Survey collects information on the respondent's main job. The activity of this person's employer at the location of their main job is classified into one of the following industry divisions: Agriculture, Forestry and Fishing; Mining; Manufacturing; Electricity, Gas and Water Supply; Construction; Wholesale Trade; Retail Trade; Accommodation, Cafes and Restaurants; Transport and Storage; Communication Services; Finance and Insurance; Property and Business Services; Government Administration and Defence; Education; Health and Community Services; Cultural and Recreational Services and Personal and Other Services.

Changes in the number of employees per industry can be a reflection of the level of economic activity. When an industry is expanding it will usually increase its number of employees. When an industry is contracting it will usually reduce the number of employees.

Changes in the structure of the industry will also affect the number of employees per industry. Technology and new work practices are common reasons for industries increasing or decreasing the number of people they employ.

The ABS also collects information on employment and earnings from a sample of employers. That survey provides wage and salary employment statistics at industry, sector and State level. Information on employment in specific industries is also collected in certain annual or periodic censuses or surveys of those particular industries.

Statistics on employed persons by industry are used by the government to plan for changes in the labour market by industry sector.

Further Reading

- ☐ *Labour Statistics, Australia* (6101.0)
  Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

- ☐ *The Labour Force, Australia* (6203.0)
  Contains estimates of the civilian population aged 15 and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

- ☐ Information Paper: *Measuring Employment and Unemployment* (6279.0)
  Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

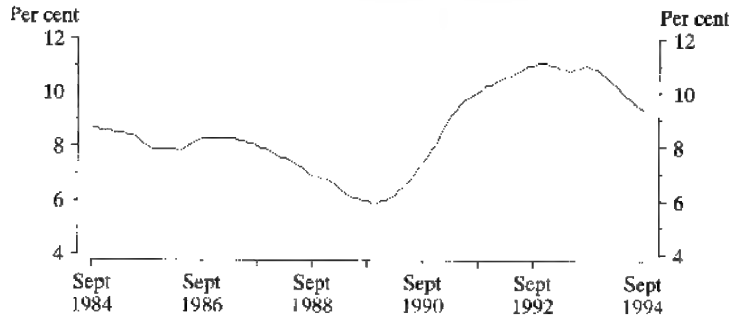
- ☐ *Employed Wage and Salary Earners, Australia* (6248.0)
  Contains estimates of employees by sex, full-time/part-time, industry and sector. Estimates of gross earnings classified by industry and sector are also shown. Estimates are available for Australia, States and Territories.

2.6.3 Unemployment

Comment

Trend estimates of the unemployment rate increased from 5.9% in November 1989 to 10.0% in September 1991 and remained at double-digit levels for over two-and-a-half years. The trend estimate of the unemployment rate peaked at 11.1% in October to December 1992 and has since been decreasing. In September 1994, the trend estimate unemployment rate was 9.4%, the lowest level since April 1991.

UNEMPLOYMENT RATE — PERSONS
TREND



Source: ABS 6203.0, Monthly data

LABOUR FORCE STATUS OF CIVILIAN POPULATION: PERSONS

Period	*Unemployed ('000)*	*Employed ('000)*	*Labour force ('000)*	*Civilian population aged 15+ years ('000)(a)*	*Unemployment rate (%)*	*Participation rate (%)*
			ANNUAL AVERAGE			
1988–89	534.6	7,548.7	8,083.3	12,908.5	6.6	62.6
1989–90	513.7	7,832.0	8,345.7	13,139.9	6.2	63.5
1990–91	709.0	7,782.4	8,491.5	13,343.4	8.4	63.6
1991–92	881.7	7,636.7	8,518.4	13,527.6	10.4	63.0
1992–93	940.5	7,633.9	8,574.4	13,691.0	11.0	62.6
1993–94	915.5	7,780.6	8,696.0	13,853.5	10.5	62.8
			MONTHLY — TREND			
1993–94—						
July	939.7	7,664.7	8,604.4	13,778.0	10.9	62.5
August	946.3	7,685.7	8,632.0	13,791.3	11.0	62.6
September	950.1	7,709.7	8,659.8	13,804.7	11.0	62.7
October	949.6	7,736.1	8,685.6	13,818.6	10.9	62.9
November	944.9	7,761.4	8,706.3	13,832.4	10.9	62.9
December	935.8	7,784.6	8,720.4	13,846.3	10.7	63.0
January	923.4	7,801.8	8,725.2	13,860.4	10.6	63.0
February	908.9	7,815.2	8,724.1	13,874.4	10.4	62.9
March	894.3	7,828.4	8,722.7	13,888.5	10.3	62.8
April	880.5	7,846.3	8,726.8	13,902.2	10.1	62.8
May	867.9	7,870.7	8,738.5	13,915.9	9.9	62.8
June	855.9	7,899.9	8,755.8	13,929.6	9.8	62.9
1994–95—						
July	845.5	7,930.4	8,775.9	13,944.5	9.6	62.9
August	836.9	7,959.0	8,795.9	13,959.5	9.5	63.0
September	830.7	7,984.0	8,814.7	13,974.6	9.4	63.1

(a) Series is non seasonal. Original data provided.
Source: ABS, *The Labour Force, Australia* (6203.0).

Explanatory Notes

Unemployment exists when people without a job are looking for work but unable to find employment. Once a month the Australian Bureau of Statistics conducts a Labour Force Survey in order to monitor the numbers of the employed, the unemployed and those not in the labour force.

The labour force is made up of the civilian population aged 15 years or over who are already working and people who do not have a job but are actively looking for work and are available to start work.

The individuals in the labour force who are not employed, but who are actively looking for work and are available to start work, are defined by the ABS as unemployed. The ABS follows international definitions. Actively looking for work includes writing, telephoning or applying in person to an employer or registering with the Commonwealth Employment Service. However, whether a person is unemployed or not is measured by the ABS independently of whether he or she is receiving a Jobsearch or Newstart allowance from the Department of Social Security or is registered with the Commonwealth Employment Service.

The unemployment rate is the percentage of the labour force that is unemployed.

Individuals who cease to actively look for work are defined as not in the labour force.

The participation rate for any group is the labour force expressed as a percentage of the civilian population aged 15 and over in the same group. It measures the number of people who are participating in the labour force by either working or looking for work.

Statistics on unemployment are used by governments, businesses, industrial tribunals, the media, academics and other research workers to provide a better understanding of the current economic situation when formulating policy.

Further Reading

- ☐ *Labour Statistics, Australia* (6101.0)
  Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

- ☐ *The Labour Force, Australia* (6203.0)
  Contains estimates of the civilian population aged 15 and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

- ☐ Information Paper: *Measuring Employment and Unemployment* (6279.0)
  Provides information about the monthly labour force survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

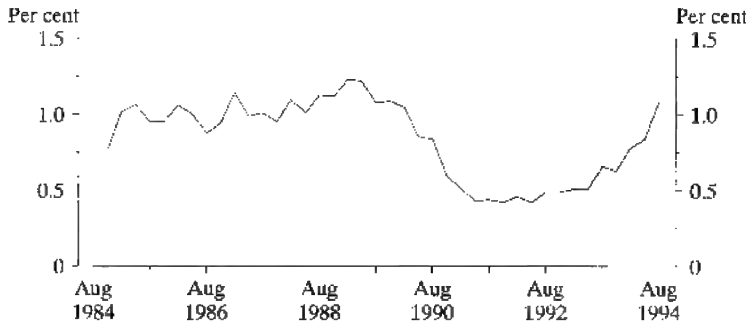
- ☐ *Australia's Long Term Unemployed —A Statistical Profile (6255.0)*
  Contains a profile of long-term unemployed and also an international comparison.

2.6.4 Job Vacancies

Comment

The economic recovery in the mid-1980s saw strong growth in job vacancies per 1,000 persons unemployed. After reaching a peak of 139.1 in the May quarter 1989 the rate fell sharply to reach 28.7 vacancies per 1,000 persons unemployed in May 1992.

JOB VACANCY RATE



Source: ABS 6354.0. Quarterly data

JOB VACANCIES
('000)

Period	*Manufacturing (a)*	*All industries*	*Job vacancies per '000 unemployed*	*Job vacancy rate*
		ANNUAL AVERAGE		
1988–89	14.6	69.5	130.3	1.18
1989–90	11.4	59.5	118.0	1.02
1990–91	5.0	34.1	51.0	0.60
1991–92	3.0	25.6	29.3	0.44
1992–93	3.4	29.3	31.3	0.50
1993–94	5.4	43.1	47.3	0.73
		QUARTERLY — TREND UNLESS FOOTNOTED		
1992–93—				
February	2.6	30.1	32.0	0.51
May	3.1	32.6	35.1	0.51
1993–94—				
August	3.9	35.6	37.6	0.66
November	4.9	39.5	41.8	0.63
February	6.3	45.9	50.5	0.78
May	6.5	54.0	62.2	0.84
1994–95—				
August	12.7	60.3	72.1	1.08

(a) Trend data not available.
Sources: ABS, *Job Vacancies and Overtime, Australia* (6354.0) and *The Labour Force, Australia* (6203.0).

Explanatory Notes

One measure of the demand for labour is the number of job vacancies. When the demand for labour is low, the number of job vacancies is reduced. If the demand for labour is high, the number of job vacancies increases.

The demand for labour is an indicator of changes in the level of economic activity. Recessions are characterised by a low level of job vacancies, while periods of economic growth tend to be characterised by an increase in job vacancies.

A job vacancy is a job available for immediate filling on the survey reference date and for which recruitment action has been taken. Recruitment action includes efforts to fill vacancies by advertising, factory notices, notifying public or private employment agencies, notifying trade unions and by contacting, interviewing or selecting applicants already registered with the enterprise or organisation. Excluded are jobs available only to persons employed by the enterprise or organisation, e.g. the Australian Public Service and the Public Services of each of the States and Territories.

The job vacancy rate is calculated by expressing the number of job vacancies as a percentage of employees plus vacancies. The government, unions and private bodies monitor the job vacancy rates in order to get an indication of the level of future employment. A rise in job vacancies is usually followed by an increase in employment.

Job vacancy statistics are collected by sector (public and private), industry, State or Territory and as a national total. Industry statistics are used to identify the industries experiencing growth or decline. State and Territory statistics show employment prospects and the prospect of economic growth for each of the States or Territories by public and private sectors.

Further Reading

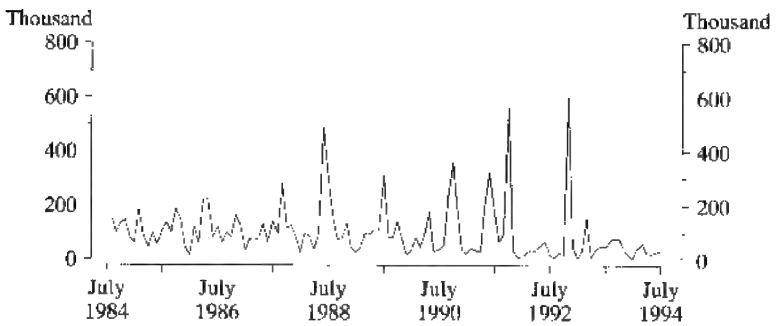
- ☐ *Job Vacancies and Overtime, Australia* (6354.0)
  Contains quarterly estimates of the number of job vacancies and job vacancy rates by sector, industry and State and Territory.

2.6.5 Industrial Disputes

Comment

Working days lost due to industrial disputes have generally declined since the early 1980s. However, while there are fewer disputes, the 1990s saw larger numbers of employees involved leading to large numbers of working days lost in June 1988, October 1991 and November 1992.

WORKING DAYS LOST



Source: ABS 6321.0, Monthly data

INDUSTRIAL DISPUTES WHICH OCCURRED DURING THE PERIOD: AUSTRALIA

Period	*Number of disputes (a)*	*Employees involved ('000)*	*Working days lost ('000)*	*Working days lost per '000 employees (b)*
		ANNUAL		
1988–89	1,467	670	1,285	206
1989–90	1,245	777	1,182	185
1990–91	1,201	856	1,574	254
1991–92	884	1,036	1,170	195
1992–93	643	999	1,016	170
1993–94	541	316	531	91
		MONTHLY		
1992–93—				
May	67	60	41	174
June	64	60	50	170
1993–94—				
July	66	42	49	177
August	66	60	72	188
September	49	43	81	197
October	70	80	80	208
November	55	54	40	112
December	40	12	19	108
January	35	5	5	117
February	43	27	46	110
March	41	26	61	94
April	41	24	26	97
May	51	16	24	94
June	49	8	28	91
1994–95—				
July	55	16	36	88

(a) Prior to September 1991 disputes affecting more than one industry and/or State were counted as a separate dispute in the Australian total. Thereafter such disputes were counted just once at the Australian level. (b) Monthly figures are calculated for the 12 months ending each month listed.

Source: ABS, Industrial Disputes, Australia (6321.0).

Explanatory Notes

An industrial dispute is defined as a strike or a lock-out. A strike is when employees refuse to work. A lock-out occurs when the employer does not allow the employees to work. In both cases the normal duties of the employee are not being performed.

The ABS collects information on industrial disputes according to the reason for work stoppage. Reasons are classified into: wages, hours of work, managerial policy, physical working conditions, leave, pensions and compensation, trade unionism and other. Statistics are collected for stoppages when the dispute takes up 10 employee working days or more, that is, when time lost at the establishments where the stoppage occurred is collectively equal to or more than 10 working days. This can involve a small number of employees over a long period of time, or a large group of employees over a short period of time.

Statistics on industrial disputes are used by government departments, industrial relations authorities, employer organisations, employee unions, etc. as broad indicators of the level of industrial unrest.

Further Reading

- ☐ *Labour Statistics, Australia* (6101.0)
  Contains annual time series statistics on the Australian labour market in tabular and graphical form, including industrial relations.

- ☐ *Industrial Disputes, Australia* (6321.0)
  Contains monthly data on the number of disputes, workers involved and other industrial dispute measurements by State, industry, duration, cause and method of settlement.

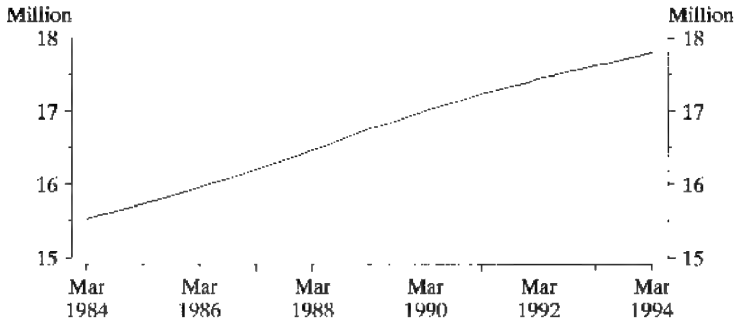
- ☐ *Industrial Disputes, Australia* (6322.0)
  Contains calendar year data on the number of disputes, workers involved and other industrial dispute measurements by State, industry, duration, cause and method of settlement. There are separate tables for disputes in progress during the year and disputes that ended during the year. Final issue 1993.

2.6.6 Population

Comment

Australia's population has grown at a very steady rate with an average annual rate of growth of 1.4% from March quarter 1983 to March quarter 1994. From September quarter 1985 to March quarter 1990, natural increase and net migration contributed similar amounts to growth in Australia's population. Since March 1990, the contribution to population growth from migration decreased until there was a negative net migration in June quarter 1993.

ESTIMATED RESIDENT POPULATION



Source: ABS 3101.0, Quarterly data

ESTIMATED RESIDENT POPULATION AND COMPONENTS OF POPULATION CHANGE (a)
('000)

Period	*Natural increase*	*Net immigration*	*Total increase (b)(c)*	*Total population at end of period*
		ANNUAL		
1987–88	125.7	149.3	268.3	16,532.2
1988–89	131.4	157.4	282.2	16,814.4
1989–90	132.4	124.7	250.7	17,065.1
1990–91	141.6	86.4	218.9	17,284.0
1991–92	136.0	69.0	205.1	17,489.1
1992–93	138.2	30.1	168.3	17,657.4
		QUARTERLY		
1992–93—				
September	31.8	15.2	47.0	17,536.1
December	32.9	2.9	35.8	17,571.9
March	38.1	18.3	56.5	17,628.4
June	35.3	-6.4	29.0	17,657.4
1993–94—				
September	32.1	17.4	49.5	17,708.8
December	32.9	4.1	37.0	17,745.8
March	34.9	22.5	57.4	17,803.3

(a) Usual residence basis. (b) Total population increase is equal to the change in population (including deaths). (c) Prior to 1991–92 includes a statistical adjustment to balance the combined components against the intercensal increase indicated by the 1991 census.
Source: ABS, *Australian Demographic Statistics* (3101.0).

Explanatory Notes

Population is defined as the total number of people residing in a country. The ABS bases its estimates of the population of Australia on the Census of Population and Housing. Between each census, estimates are made of the population using a range of data including migration levels, births, deaths and other indicators of population change.

While the census counts people at their actual place of location within Australia on census night, State or Territory population estimates are based on census counts according to where people usually reside in Australia. To obtain population estimates from these usual residence counts, adjustments are made for census undercount, overseas visitors are excluded and Australian residents temporarily overseas on census night are added. These population estimates, derived from census counts are then updated quarterly until the next census in five years time, by adding estimates of natural increase and net migration.

The population will vary as a result of natural increase and net migration. Natural increase is the number of births less the number of deaths. When net migration remains zero and there are more births than deaths the population will increase; if there are more deaths than births the population will fall.

Net migration is the number of permanent and long-term movements to Australia, less the number of permanent and long-term movements out of Australia.

Population estimates are used by the Government to determine the number of seats allocated to each State in the House of Representatives and also to allocate Commonwealth funds to each State and local government authority. In addition, they are used to plan requirements for hospitals, schools, transport, housing development and other infrastructure and to formulate migration policy.

Further Reading

- ☐ *Australian Demographic Statistics* (3101.0)
  Contains quarterly estimates of total population by States, Territories and Australia. Included are the most recent estimates of population in five-year age groups. Details of the components of population, vital statistics and migration are also included.

- ☐ *Estimated Resident Population by Sex and Age: States and Territories of Australia* (3201.0)
  Contains annual estimates of population for each State and Territory classified by sex and single years of age (0 to 84).

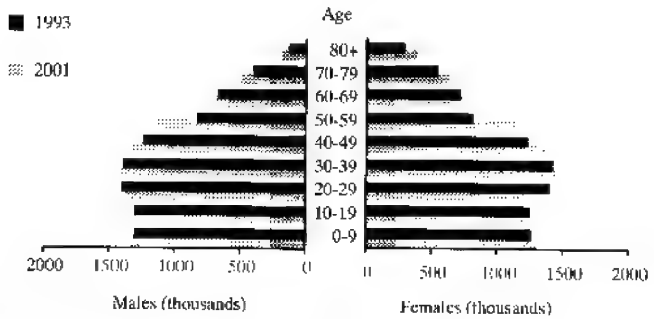
- ☐ *Projections of the Populations of Australia, States and Territories* (3222.0)
  Provides four alternative projections of the resident population by selected ages and sex by State for each year to 1996 and from 2001 at five-yearly intervals to 2041.

2.6.7 Demography

Comment

The Australian population is continuing to assume an older age profile. As at 30 June 1992 the number of persons aged 60 years or more was 2.7 million or 15.6% of the total population. This figure is projected to increase to 3.2 million or 16.2% of the total population in the year 2001. The proportion of children aged 0–9 years is projected to decrease from 14.6% of the total population at 30 June 1992 to 13.4% in the year 2001.

AUSTRALIAN POPULATION: AGE AND SEX DISTRIBUTION 1993 AND 2001



Sources: ABS 3201.0, Annual data and 3222.0, Annual data

DEMOGRAPHY

	Net reproduction rate	*Life expectancy at birth —males*	*Life expectancy at birth —females*	*Infant mortality rate*	*Crude marriage rate*	*Net overseas migration*
			ANNUAL			
1988	0.88	73.10	79.51	8.7	7.1	172,794
1989	0.88	73.32	79.60	8.0	7.0	129,478
1990	0.91	73.87	80.06	8.2	6.9	97,131
1991	0.89	74.40	80.39	7.1	6.6	81,877
1992	0.91	74.47	80.41	7.0	6.6	51,774
1993	0.90	74.99	80.86	6.1	6.4	33,485

Sources: ABS, *Australian Demographic Statistics* (3101.0), *Births, Australia* (3301.0), *Deaths, Australia* (3302.0) and *Marriages, Australia* (3306.0)

Explanatory Notes

Demographic data assist researchers in studying the characteristics of the population. Examining these types of data over a period of time helps researchers and policy makers to understand the changing characteristics of the population.

An indication of the extent to which the population reproduces itself is the net reproduction rate. This rate measures the average number of daughters born by women. A net reproduction rate of 0.91 indicates the population is about 9% below replacement level.

Life expectancy at birth indicates how long a new born baby can be expected to live. Life expectancy is often used to indicate changes in the health status of a community or to make comparisons between communities.

Infant mortality measures the number of deaths of babies who are less than 1 year old per thousand live births.

The crude marriage rate measures the number of marriages registered during a calendar year per thousand of the mean population for the calendar year. The crude marriage rate includes first marriages and remarriages.

One of the most important factors in Australia's economic and social development has been the contribution made by overseas born Australians. Net overseas migration, i.e. the difference between permanent and long-term arrivals and departures and the natural increase in the population (excess of births over deaths) are the two components of Australia's population change.

Further Reading

- ☐ *Australian Demographic Statistics* (3101.0)
  Contains quarterly estimates of the population by States, Territories and Australia. Details of the components of population, vital statistics and migration are also included.

- ☐ *Births, Australia* (3301.0)
  Contains annual data on births, characteristics of the parent(s) and also shows crude and age-specific birth rates and reproduction rates.

- ☐ *Deaths, Australia* (3302.0)
  Contains annual data on the number of deaths by State, Territory and Australia. Deaths are classified by age, sex, birthplace, marital status, occupation and cause of death.

- ☐ *Causes of Death, Australia* (3303.0)
  Contains annual data on the causes of death by selected age groups.

- ☐ *Marriages, Australia* (3306.0)
  Contains annual data on marriages by State and Territory of registration, characteristics of brides and bridegrooms and type of celebrant. Final issue 1993.

- ☐ *Marriages and Divorces, Australia, 1994* (3310.0)
  Presents details of marriages and divorces and includes estimates of the population by marital status.

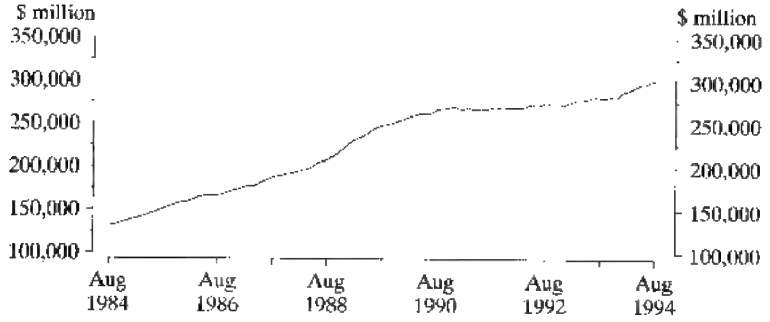
Section 2.7
Financial Markets

2.7.1 M3, Broad Money and Credit

Comment

Over the period from 1984 to 1994 the amount of money in circulation in the Australian economy, as measured by the broad money supply, has risen from $131,122m in August 1984 to $301,075m in August 1994. Money supply then grew rapidly from 1988 to 1990 after which growth slowed before increasing again in late 1993.

BROAD MONEY, SEASONALLY ADJUSTED



Source: Reserve Bank of Australia Bulletin, Monthly data

SELECTED FINANCIAL AGGREGATES
($ million)

Period	*M3 (a)*	*Broad money (b)*	*Total credit (c)*
	ANNUAL		
1988–89	166,506	242,022	300,879
1989–90	190,410	261,917	332,932
1990–91	202,650	266,402	340,796
1991–92	208,523	270,167	335,858
1992–93	229,612	279,313	343,059
1993–94	246,225	295,551	366,325
	MONTHLY — SEASONALLY ADJUSTED		
1992–93—			
June	229,809	280,221	343,183
1993–94—			
July	232,022	281,674	343,066
August	230,536	280,068	344,482
September	231,793	280,526	345,872
October	233,564	281,953	347,328
November	234,969	283,208	349,726
December	234,248	282,730	351,824
January	239,568	287,337	353,097
February	240,735	288,522	354,774
March	243,669	291,700	357,575
April	245,816	294,428	360,757
May	247,540	296,329	363,481
June	246,544	296,518	366,286
1994–95—			
July	248,978	299,425	369,865
August	250,441	301,075	372,718

(a) Currency plus bank deposits (including certificates of deposits with trading banks) of private non-bank sector. (b) M3 plus borrowings from private sector by non bank financial intermediaries less the latter's holdings of currency and bank deposits. (c) Credit is equal to bank bills outstanding plus loans and advances by financial intermediaries whose liabilities are included in Broad Money.
Source: RBA, *Reserve Bank of Australia Bulletin.*

Explanatory Notes

Financial aggregates have long been used by central banks as indicators of the effects of monetary policy. Aggregates can be useful if they have a stable relationship with income or spending, or with the aggregate price level. Aggregates currently used in Australia are currency, M1, M3, Broad Money and Credit.

The first four of these are monetary aggregates and refer mainly to liabilities of the finance sector while credit is a measure based on financial intermediaries' assets. Definitions are as follows:

currency = non-bank private sector holdings of notes and coin.

M1 = currency + deposits of the non-bank private sector in cheque accounts with banks.

M3 = M1 + all other deposits of the non-bank private sector with banks.

Broad Money = M3 + borrowing by non-bank financial intermediaries from the non-financial private sector.

Credit = outstanding loans and advances from financial intermediaries to the private non-financial sector, plus bank bills outstanding.

(A former aggregate, M2, which combined currency with all private sector deposits with trading banks is no longer of use as the legal distinction between trading and savings banks has been abolished.)

Between 1976 and 1985 projections for M3 growth were established by the authorities in order to determine the stance of monetary policy. Relationships between money and credit, economic growth and inflation are complex, however, and in the period following deregulation of the financial system, these relationships appear to have broken down. Because of this, policies targeting a monetary aggregate are no longer pursued, though financial aggregates remain in the set of indicators used in setting and assessing the effects of monetary policy.

Further Reading

- ☐ *Reserve Bank of Australia Bulletin*
  Contains monthly levels of selected monetary aggregates for Australia. See also the feature article *Recent Trends in Money and Credit* in the December 1991 issue of *Reserve Bank of Australia Bulletin.*

- ☐ *Financial Aggregates*
  Monthly Reserve Bank of Australia press release containing Australia's financial aggregates.

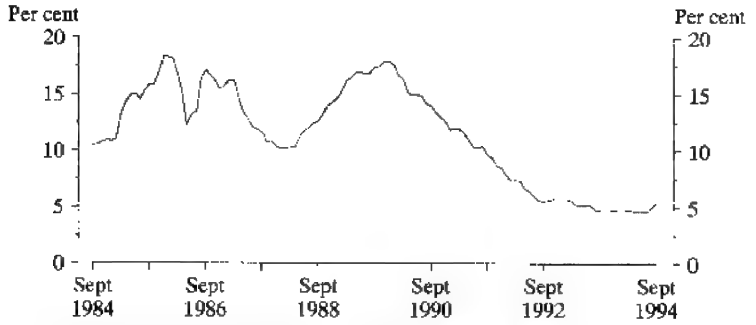
- ☐ *Australian National Accounts: Financial Accounts* (5232.0)
  Shows the level (stock) of financial assets and liabilities of each sector of the economy; the market for each of the conventional financial instruments; and inter-sectoral transactions in financial assets and liabilities.

2.7.2 Interest Rates

Comment

The official cash rate fluctuated significantly between August 1984 and February 1987 before falling to 10.23% in December 1987. In October 1989 the official cash rate peaked at 17.94% before experiencing a sustained decline to 4.65% in June 1994.

PRIVATE OFFICIAL CASH RATE (a)



(a) Authorised dealers, weighted average rate. Data are the weighted average of the month.
Source: Reserve Bank of Australia Bulletin, Monthly data

KEY INTEREST RATES (a)
(per cent)

Period	*Private official cash rate (b)*	*Private prime rate*	*Private 90-day bank bills (c)*	*Commonwealth government 10-year treasury bonds*
		ANNUAL		
1988–89	16.95	20.25	18.30	13.50
1989–90	14.98	18.75	15.10	13.40
1990–91	10.39	14.25	10.50	11.15
1991–92	6.41	10.75	6.40	8.90
1992–93	5.21	9.50	5.25	7.35
1993–94	4.69	9.00	5.45	9.65
		MONTHLY		
1993–94—				
July	5.19	9.50	4.95	6.90
August	4.72	9.00	4.75	6.65
September	4.68	9.00	4.85	6.85
October	4.69	9.00	4.80	6.50
November	4.71	9.00	4.80	6.80
December	4.73	9.00	4.85	6.70
January	4.70	9.00	4.80	6.35
February	4.71	9.00	4.80	7.05
March	4.73	9.00	4.95	7.95
April	4.68	9.00	4.85	8.45
May	4.67	9.00	4.85	8.80
June	4.69	9.00	5.45	9.65
1994–95—				
July	4.65	9.00	5.40	9.55
August	5.00	9.00	5.70	9.35
September	5.45	9.75	6.10	10.35

(a) All data are end of period unless otherwise stated. (b) Authorised dealers: Weighted average rate. Data are the weighted average of the month, annuals are from the last month of the year. (c) Data are the weighted average of the last week of the period.
Source: RBA, *Reserve Bank of Australia Bulletin*.

Explanatory Notes

Interest is the compensation paid to a lender for deferring expenditure and the price paid by a borrower for the use of the funds saved by the lender.

There are different rates of interest which vary according to factors such as the amount borrowed, the length of time and the credit rating of the borrower. As a guide to the level of long-term interest rates, the yield (i.e. the equivalent of the interest rate) on a 10-year Treasury bond is shown. The cash rate, prime rate and 90-day bank bill yield are examples of short-term interest rates.

The cash rate measures the amount of interest paid on overnight or one-day loans. This short-term money market is where banks and other large corporations lend funds that are temporarily surplus to other banks, etc. which have a temporary shortfall.

The Reserve Bank of Australia operates in the short-term money market in order to influence the cash rate (by borrowing and lending funds itself). In turn, changes in the level of the cash rate affect other interest rates.

Interest rates on short-term investments, e.g. 90-day bank bills, are very closely related to the cash rate. Ultimately, interest rates on bank deposits and funds placed with building societies, credit unions and the like are also related to the cash rate to varying degrees. Changes in the cost of borrowing by intermediaries flow through to their loan rates. For example, the prime rate, which indicates the amount of interest charged by banks on loans to preferred customers, tends to move at an equal pace with the cash rate.

These interrelationships allow the Reserve Bank, through its operations in the short-term money market, to have an effect on many interest rates in the economy. This means that the Bank can influence the cost and hence the amount of borrowing and lending in the economy, with the aim of maintaining low inflation and contributing to a policy mix to achieve strong economic growth.

Further Reading

- ☐ *Reserve Bank of Australia Bulletin*
  Contains monthly information on interest rates for the money market, capital market, banks and other financial institutions.

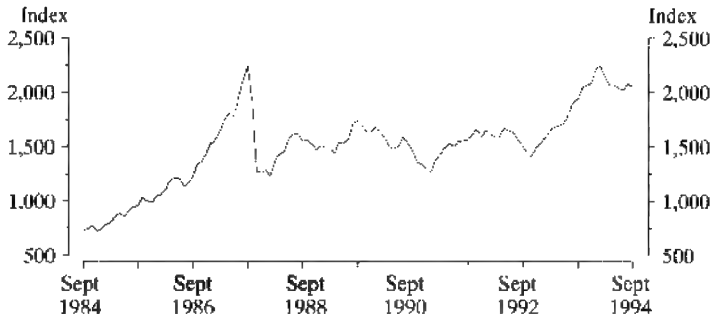
- ☐ *Monthly Statistics for Corporations Registered under the Financial Corporations Act* (5647.0)
  Contains monthly statistics, including interest rates, for all financial corporations registered under the Financial Corporations Act.

2.7.3 Share Price Indexes

Comment

After sustained growth, the all ordinaries index experienced strong growth from November 1986 to September 1987. This growth was brought to an abrupt halt with the stock market crash of October 1987, which resulted in an immediate fall in the all ordinaries index. From the time of the crash to November 1992, the index displayed modest fluctuations, with a stronger upward trend beginning in December 1992.

ALL ORDINARIES INDEX
(31 DEC 1979 = 500.0)



Source: Australian Stock Exchange, Monthly data

SHARE PRICE INDEXES (a) (31 DEC 1979 = 500.0)

Period	*All industrials*	*All resources*	*All ordinaries*
	ANNUAL		
1988–89	2,498.3	798.2	1,527.7
1989–90	2,367.9	855.3	1,508.8
1990–91	2,330.7	873.5	1,504.9
1991–92	2,550.0	965.7	1,652.7
1992–93	2,665.7	1,002.7	1,722.6
1993–94	2,984.7	1,331.1	2,040.2
	MONTHLY		
1993–94—			
July	2,742.9	1,076.3	1,797.3
August	2,897.4	1,128.4	1,893.9
September	3,037.8	1,098.4	1,939.5
October	3,185.4	1,173.5	2,045.3
November	3,205.6	1,197.9	2,067.3
December	3,191.6	1,237.0	2,081.9
January	3,353.5	1,366.9	2,223.2
February	3,414.0	1,361.0	2,247.0
March	3,275.9	1,287.9	2,146.4
April	3,156.0	1,249.4	2,072.5
May	3,106.7	1,283.2	2,068.7
June	2,984.7	1,331.1	2,040.2
1994–95—			
July	2,973.7	1,302.4	2,019.9
August	3,026.0	1,363.2	2,075.7
September	2,928.1	1,407.7	2,054.8

(a) Share prices on joint trading floors. Monthly figures are average of daily figures for the month. Annual index is from the last month of the year.
Source: Australian Stock Index, *Monthly Index Analysis*.

Explanatory Notes

Share price indexes provide an indication of aggregate price movements for listed shares on the Australian Stock Exchange (ASX).

The most quoted index is the all ordinaries share price index. The all ordinaries is calculated from a sample of shares which include those of approximately 260 companies which account for over 90 per cent of the ordinary shares of domestic companies listed on the Australian market.

The all ordinaries sample is reviewed each month and is chosen mainly on the basis of the market value of the company and how often the shares are traded.

Another important index is the all resources index which measures the movement in share prices for leading mining and oil companies. The Australian Stock Exchange also produces 23 sub-indexes for specific sectors within the share market. These measure the rise and fall in the Aggregate Market Value (AMV) of shares included in the sub-index. Some industries (e.g. car manufacturers) have no publicly listed shares in Australia, so no share indexes can be produced for these industries.

Share price indexes only measure the capital gain or loss experienced by shareholders through fluctuations in share prices and do not take into account dividends earned. Share prices reflect business confidence in general, as well as in specific industries. A set of 28 accumulation indexes is also calculated by the Australian Stock Exchange. These are intended to indicate the total pre-tax returns (after reinvesting dividends) from investments in listed shares.

Further Reading

- ☐ *Companies on the Australian Stock Exchange Indices*
  Presents a detailed explanation of the indexes produced by the Australian Stock Exchange and lists the index portfolio at the time of the publication (updated quarterly).

- ☐ *Monthly Index Analysis*
  Contains monthly records of all Australian share price and accumulation index movements, including sample changes, index weights comparisons with international indexes, currency adjusted indexes and exchange rates.

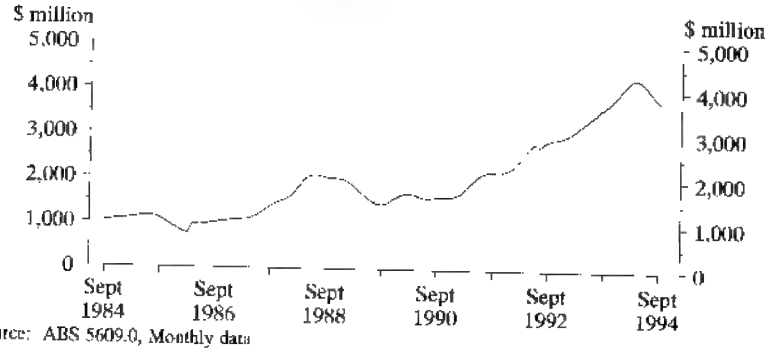
- ☐ *Australian Stock Exchange Indices and Yields Book*
  Updates the popular *Stock Exchange Indices and Statistics* book published in 1986. It contains tabulations of historical data covering all ASX share price and Accumulation Indexes monthly from 1979 to 1992. It also provides longer monthly tabulations back as far as 1875 for selected indexes.

2.7.4 Home Loans

Comment

Total secured housing finance commitments to individuals, in trend estimate terms increased from $754.4m in March 1986 to $2,099.5m in June 1988. This was followed by a stronger growth period from $1,461.4m in September 1989 to $4,305.4m in April 1994, the highest level recorded since the beginning of the series.

TOTAL SECURED HOUSING FINANCE COMMITMENTS TO INDIVIDUALS, TREND



Source: ABS 5609.0, Monthly data

SECURED HOUSING FINANCE COMMITMENTS TO INDIVIDUALS (a)

Period	*Construction of dwellings ($m)*	*Purchase of newly erected dwellings ($m)*	*Purchase of established dwellings ($m)(b)*	*Total ($m)*	*New bank home loans interest rate (%)(c)*
			ANNUAL		
1988–89	4,025.3	1,237.4	17,525.0	22,787.8	17.0
1989–90	3,535.7	1,085.4	14,338.8	18,959.9	16.5
1990–91	3,821.2	1,320.3	15,634.3	20,775.7	13.0
1991–92	4,828.3	1,636.2	19,878.6	28,538.4	10.5
1992–93	6,450.1	1,750.3	24,126.4	36,778.0	9.5
1993–94	8,139.5	2,368.4	30,626.1	47,628.2	8.8
			MONTHLY — TREND		
1993–94—					
July	593.3	165.7	2,729.7	3,488.7	9.5
August	603.8	166.4	2,798.5	3,568.7	9.5
September	617.1	168.6	2,868.1	3,653.8	8.8
October	632.5	174.9	2,940.3	3,747.7	8.8
November	649.3	185.1	3,017.6	3,852.0	8.8
December	668.7	197.8	3,102.7	3,969.2	8.8
January	690.4	210.9	3,189.7	4,091.0	8.8
February	714.9	221.4	3,272.6	4,208.9	8.8
March	735.3	226.0	3,326.0	4,287.4	8.8
April	746.7	224.5	3,327.1	4,298.3	8.8
May	748.2	219.7	3,270.5	4,238.4	8.8
June	743.9	215.4	3,174.0	4,133.3	8.8
1994–95—					
July	735.7	212.7	3,061.1	4,009.4	8.8
August	726.2	211.1	2,948.0	3,885.4	8.8
September	716.8	211.9	2,851.7	3,780.5	9.5

(a) Excluding alterations and additions. (b) Prior to 1991 this item including refinancing. (c) Data are end of period.
Sources: ABS, *Housing Finance for Owner Occupation, Australia* (5609.0) and RBA, *Reserve Bank of Australia Bulletin* .

Explanatory Notes

Housing purchases are most commonly financed by a loan from a financial institution. Housing finance statistics measure the supply of finance only, not the demand for housing finance. The supply is, however, influenced by both the availability of and the demand for housing finance. The demand for housing loans is dependent on people's perceived ability to repay the loan. The ability to repay the loan is affected by interest rates, the price of the house, the applicant's income level and the risk of losing their source of income.

Prior to April 1986, the Federal Government regulated the housing loan interest rate. Banks were given a maximum interest rate which they were allowed to charge borrowers. The Government was aiming to make housing more affordable. Since 1986, banks have been allowed to determine the interest rate levels for housing loans.

The Government still has an influence over the interest rate through its monetary policy stance. When monetary policy is tight, interest rates are high. The cost of housing, financed by borrowing, increases. When monetary policy is loosened, interest rates fall. The cost of housing, financed by borrowing, declines.

Further Reading

- ☐ *Housing Finance for Owner Occupation, Australia* (5609.0)
  Presents data on secured finance commitments to individuals for construction of dwellings, purchase of new and established dwellings by banks, permanent building societies and other lenders.

- ☐ *Australian Economic Indicators* (1350.0)
  See feature article in the December 1991 issue on *Building Approvals and Housing Finance Statistics – Do they Tell the Same Story.*

Chapter

CHAPTER 3
INTERNATIONAL COMPARISONS

NOTE: The statistics for Germany in these tables refer to Western Germany (Federal Republic of Germany before the unification of Germany), except where otherwise indicated.

Statistics relate to members of the Organisation for Economic Cooperation and Development (OECD). The OECD comprises European Economic Community members Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom plus Austria, Finland, Iceland, Norway, Sweden, Switzerland, Turkey, the United States, Canada, Japan, New Zealand and Australia. The major seven OECD countries are Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

International Comparisons

International comparisons show the economic performance of Australia against the performance of other countries.

Some care must be taken when comparing economic indicators between countries. Statistical systems vary considerably between countries and this will affect the extent of comparability of the data.

Australian and other government statistical agencies throughout the world produce and present national accounts based on the principles contained in the United Nations *A System of National Accounts* (SNA). Although a number of other international standards have been developed for specific areas of national accounts, such as the International Monetary Fund's *Balance of Payments Manual* and *Government Finance Statistics*, the SNA has a central position in the standard setting process for economic statistics generally. However, the degree to which the system is implemented varies considerably between countries.

Further Reading

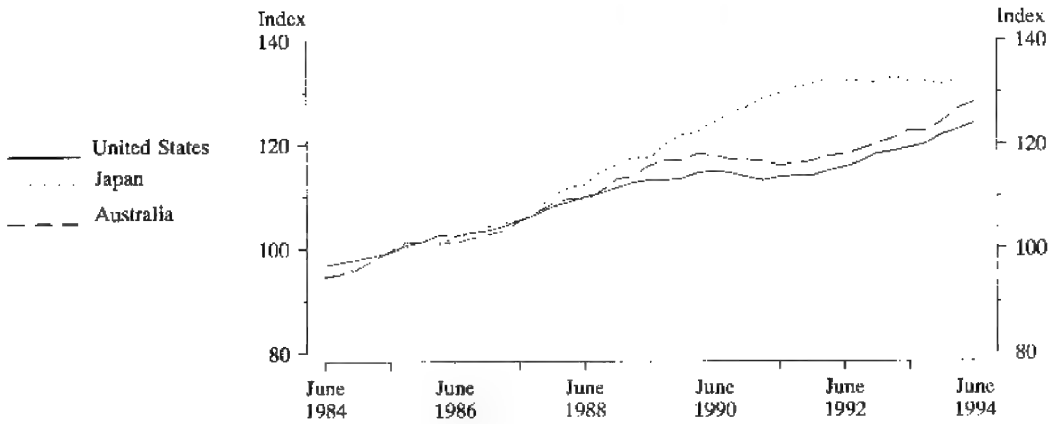
- *OECD Outlook*
  Presents data on OECD member nations, published in May and December of each year, including employment/unemployment, current account balance, inflation and real GDP.

- *OECD Economic Surveys: Australia*
  Reviews trends in the Australian economy and policy conclusions. Presents a calendar of the main economic events and Australian and international statistics in a statistical annex.

- *Australian Economic Indicators* (1350.0)
  A comprehensive, monthly compendium of economic statistics including international comparisons. Generally presents statistics for the last 9 years.

3.1 Real Gross Domestic Product

REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES
SEASONALLY ADJUSTED (1985 = 100.0)



Source: Organisation for Economic Cooperation and Development, Quarterly Data

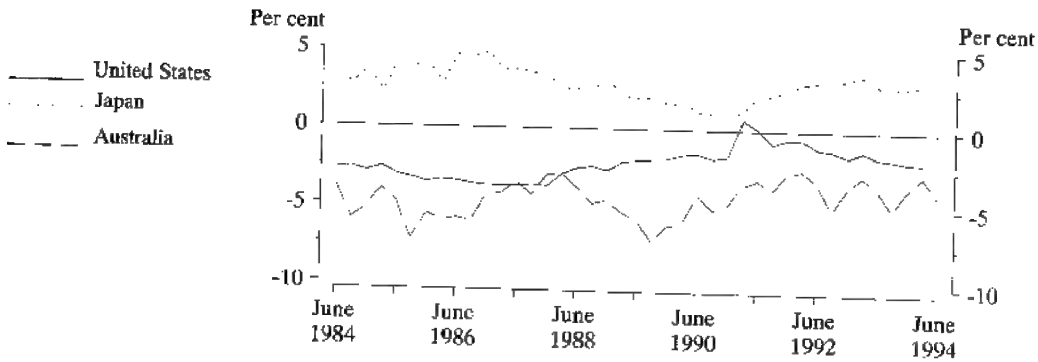
REAL GROSS DOMESTIC PRODUCT VOLUME INDEX (a)
(1985 = 100.0)

Period	*United States*	*Japan*	*Germany*	*OECD major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1988–89	112.0	116.4	109.7	113.0	116.6	113.6
1989–90	114.0	122.2	114.2	116.1	118.0	117.4
1990–91	113.8	127.9	121.5	117.6	116.4	116.6
1991–92	114.6	131.8	124.4	119.1	114.9	117.2
1992–93	118.2	132.2	123.1	120.7	115.8	120.8
1993–94	122.2	n.y.a.	n.y.a.	n.y.a.	119.0	125.5
			QUARTERLY — SEASONALLY ADJUSTED			
1992–93—						
December	118.2	131.8	123.8	120.7	115.1	120.2
March	118.6	132.9	121.6	120.8	115.5	121.1
June	119.3	132.0	122.3	121.2	116.4	122.7
1993–94—						
September	120.1	132.2	123.3	121.7	117.2	122.6
December	121.9	131.5	122.8	122.6	118.1	124.4
March	122.9	132.5	123.5	123.5	119.4	126.9
June	124.1	n.y.a.	n.y.a.	n.y.a.	120.6	128.1

(a) Data for the United States, Japan and Germany measure real gross national product.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.2 Balance on Current Account

BALANCE ON CURRENT ACCOUNT AS A PERCENTAGE OF SEASONALLY ADJUSTED GDP



Source: Organisation for Economic Cooperation and Development, Quarterly Data

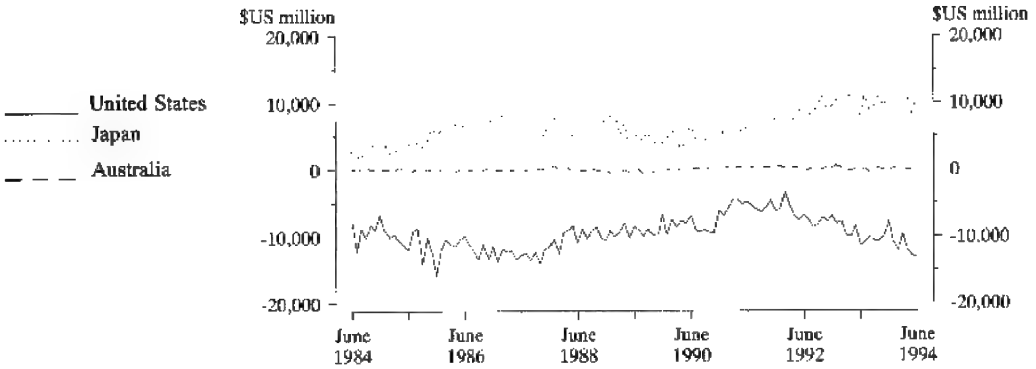
BALANCE ON CURRENT ACCOUNT: PERCENTAGE OF SEASONALLY ADJUSTED GDP (a)

Period	*United States*	*Japan*	*United Kingdom*	*Australia*
		ANNUAL		
1988–89	–2.3	2.5	–4.1	–5.1
1989–90	–1.7	1.7	–4.5	–5.9
1990–91	–0.7	1.4	–1.9	–4.2
1991–92	–0.7	2.8	–1.5	–3.1
1992–93	–1.4	3.3	–1.8	–3.8
1993–94	n.y.a.	n.y.a.	n.y.a.	–3.9
		QUARTERLY — SEASONALLY ADJUSTED		
1992–93—				
December	–1.6	3.5	–0.4	–3.6
March	–1.3	3.7	–2.2	–2.8
June	–1.6	3.0	–2.6	–3.7
1993–94—				
September	–1.8	2.9	–2.0	–5.0
December	–1.9	3.0	–0.2	–3.6
March	–1.9	3.1	–0.4	–2.8
June	n.y.a.	n.y.a.	n.y.a.	–4.1

(a) Statistics are calculated as the original balance on current account as percentage of the seasonally adjusted current price gross domestic product, except for Japan where real gross national product replaces gross domestic product.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.3 Balance on Merchandise Trade

BALANCE ON MERCHANDISE TRADE
SEASONALLY ADJUSTED



Source: Organisation for Economic Cooperation and Development, Monthly Data

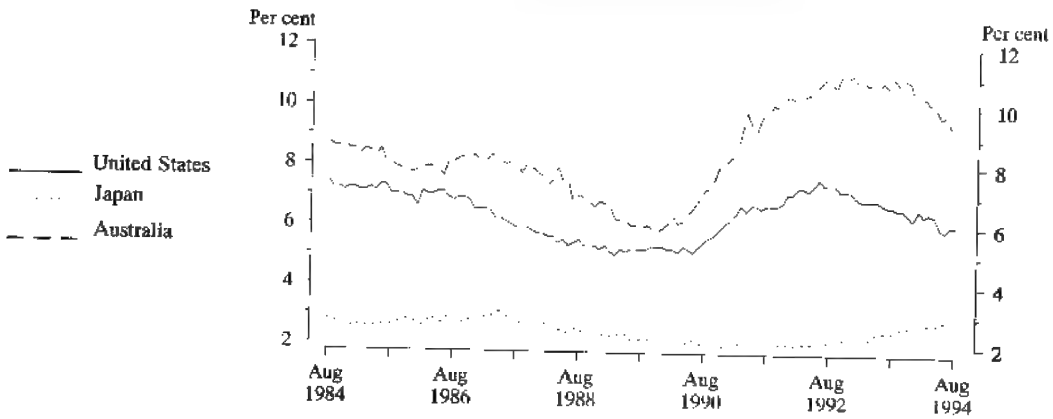
BALANCE ON MERCHANDISE TRADE (a)
($US million)

Period	*United States*	*Japan*	*Germany (b)*	*United Kingdom*	*Australia*
			ANNUAL		
1988–89	–112,829	77,747	74,205	–49,164	–2,908
1989–90	–103,029	56,755	73,250	–41,606	–1,583
1990–91	–84,114	58,313	30,600	–31,514	2,776
1991–92	–70,972	93,358	18,152	–26,381	3,023
1992–93	–102,135	113,646	31,852	–28,610	765
1993–94	–130,573	122,821	n.y.a.	n.y.a.	n.y.a.
			MONTHLY — SEASONALLY ADJUSTED		
1992–93—					
April	–9,925	11,147	3,634	–2,594	–173
May	–8,487	9,615	3,238	–2,056	33
June	–11,372	8,152	3,389	–2,106	–169
1993–94—					
July	–10,794	10,952	2,625	–2,533	106
August	–10,051	8,940	1,887	–1,069	–539
September	–10,614	9,361	2,157	–2,629	12
October	–10,830	10,774	3,846	–1,894	107
November	–9,896	9,360	3,118	–2,433	–160
December	–7,783	11,188	3,743	–2,692	–392
January	–10,851	11,066	3,729	–2,250	99
February	–12,072	10,397	3,339	–1,753	258
March	–9,583	10,316	2,482	–2,462	–20
April	–12,045	11,410	5,830	–1,607	23
May	–12,885	8,269	3,197	–2,195	–192
June	–13,171	10,790	n.y.a.	n.y.a.	n.y.a.

(a) All series are exports (f.o.b.) less imports (c.i.f.), except the United States and Australia where imports are also f.o.b. Data are measured on an international trade basis. (b) Excluding trade with the German Democratic Republic. From July 1990, data refer to Germany after unification.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.4 Unemployment Rates

STANDARDISED UNEMPLOYMENT RATES
SEASONALLY ADJUSTED



Source: Organisation for Economic Cooperation and Development, Monthly Data

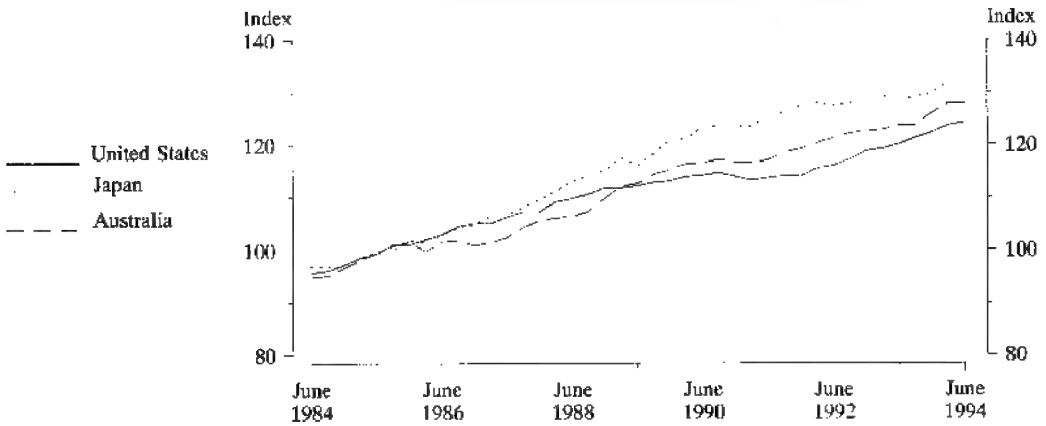
UNEMPLOYMENT RATES (a)
(per cent)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1988–89	5.2	2.2	5.6	5.7	7.2	6.0
1989–90	5.1	2.2	4.9	5.4	6.7	6.6
1990–91	6.7	2.1	4.2	6.3	8.9	9.2
1991–92	7.6	2.1	4.5	6.9	9.9	10.8
1992–93	6.8	2.5	5.7	7.0	10.3	10.9
1993–94	5.9	2.9	6.6	n.y.a.	9.5	9.8
			MONTHLY — SEASONALLY ADJUSTED			
1992–93—						
April	6.9	2.3	5.5	7.0	10.3	10.8
May	6.9	2.5	5.6	7.0	10.3	10.7
June	6.8	2.5	5.7	7.0	10.3	10.9
1993–94—						
July	6.7	2.5	5.9	7.0	10.4	10.7
August	6.7	2.5	5.9	7.0	10.4	11.0
September	6.6	2.6	6.0	7.0	10.4	10.8
October	6.6	2.7	6.2	7.0	10.2	11.0
November	6.4	2.7	6.3	6.9	10.1	10.9
December	6.3	2.8	6.3	6.9	9.9	10.5
January	6.6	2.7	6.4	7.0	10.0	10.4
February	6.4	2.9	6.5	7.0	9.9	10.4
March	6.5	2.8	6.5	7.0	9.8	10.2
April	6.4	2.8	6.6	6.9	9.6	10.1
May	6.0	2.8	6.6	6.8	9.5	9.7
June	5.9	2.9	6.6	6.7	9.5	9.8

(a) All series are OECD standardised unemployment rates.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.5 Private Consumption Expenditure Volume Index

PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES SEASONALLY ADJUSTED (1985 = 100.0)



Source: Organisation for Economic Cooperation and Development, Quarterly Data

PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEX (1985 = 100.0)

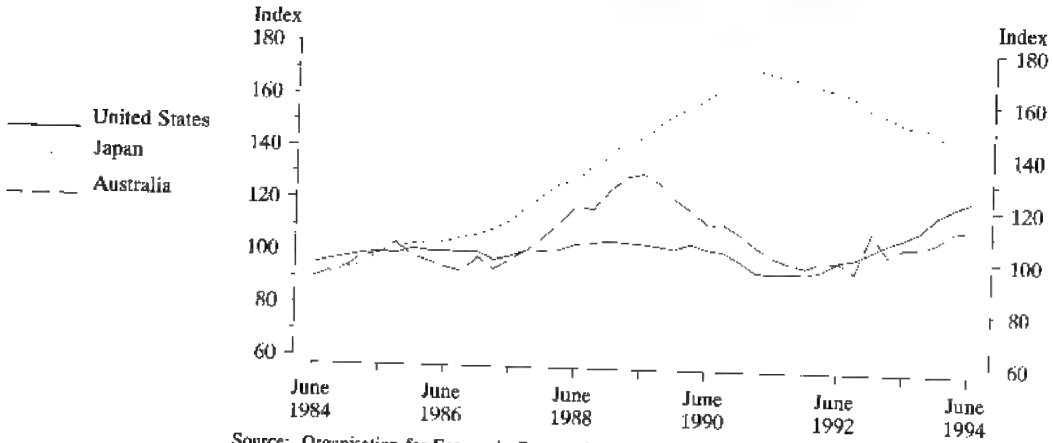
Period	*United States*	*Japan*	*Germany*	*United Kingdom*	*Australia*
		ANNUAL			
1988–89	111.6	115.7	111.6	123.7	110.5
1989–90	113.5	121.0	115.9	125.5	115.7
1990–91	113.9	124.0	122.3	124.2	116.8
1991–92	114.9	127.2	124.9	122.3	119.8
1992–93	118.8	128.3	126.4	124.2	122.8
1993–94	122.9	n.y.a.	n.y.a.	127.9	126.3
		QUARTERLY — SEASONALLY ADJUSTED			
1992–93—					
December	118.8	127.6	127.6	123.9	122.2
March	119.2	129.2	125.5	124.3	122.7
June	120.0	128.4	126.3	125.0	123.6
1993–94—					
September	121.2	129.0	127.4	126.5	123.8
December	122.3	129.9	126.2	127.9	125.9
March	123.7	131.8	n.y.a.	128.4	127.8
June	124.1	n.y.a.	n.y.a.	128.9	127.7

Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.6 Private Fixed Capital

Investment Volume Index

PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEXES SEASONALLY ADJUSTED (1985 = 100.0)



Source: Organisation for Economic Cooperation and Development, Quarterly Data

PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEX (a) (1985 = 100.0)

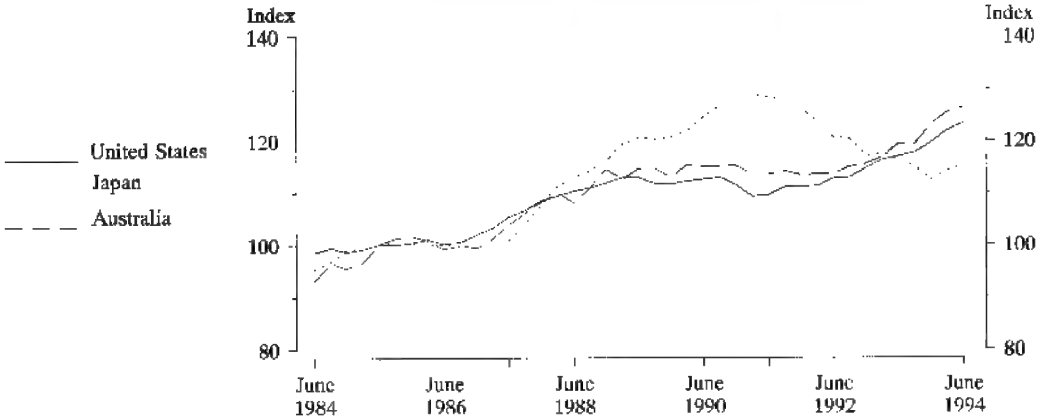
Period	*United States*	*Japan*	*Germany*	*United Kingdom*	*Australia*
		ANNUAL			
1988–89	105.1	140.5	113.6	134.3	126.1
1989–90	103.8	156.2	121.8	135.1	120.3
1990–91	97.6	169.4	131.4	124.7	106.7
1991–92	96.2	166.5	136.4	118.2	98.6
1992–93	104.8	156.2	131.4	117.8	103.4
1993–94	118.3	n.y.a.	n.y.a.	121.4	109.3
		QUARTERLY — SEASONALLY ADJUSTED			
1992–93—					
December	103.4	156.5	134.7	118.6	110.8
March	106.5	154.8	129.0	119.3	102.4
June	108.8	151.8	127.2	116.0	105.1
1993–94—					
September	111.7	152.0	128.1	117.9	105.2
December	117.7	148.0	123.2	120.5	107.3
March	120.7	145.2	n.y.a.	123.7	111.7
June	123.2	n.y.a.	n.y.a.	123.4	113.0

(a) Fixed capital investment volume indexes for Germany and the United Kingdom are for gross domestic fixed investment.

Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.7 Industrial Production Volume Index

INDUSTRIAL PRODUCTION VOLUME INDEXES
SEASONALLY ADJUSTED (1985 = 100.0)



Source: Organisation for Economic Cooperation and Development, Quarterly Data

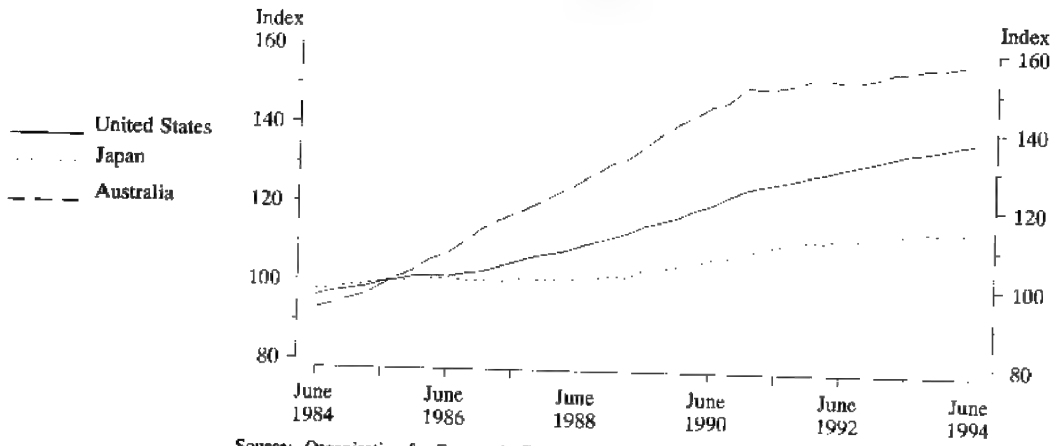
INDUSTRIAL PRODUCTION VOLUME INDEX
(1985 = 100.0)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1988–89	112.2	117.6	108.8	113.0	113.1	113.2
1989–90	112.1	121.9	114.1	114.8	114.3	114.5
1990–91	110.8	128.0	120.4	115.5	110.9	114.4
1991–92	111.6	124.6	120.5	115.1	108.1	113.7
1992–93	115.2	117.8	112.6	114.2	109.5	116.6
1993–94	120.7	114.3	110.5	116.2	113.8	123.5
			QUARTERLY — SEASONALLY ADJUSTED			
1992–93—						
December	114.7	117.1	113.1	113.9	109.5	115.5
March	116.2	117.5	109.8	114.3	109.6	116.7
June	116.9	116.2	109.4	114.2	110.1	119.4
1993–94—						
September	117.7	114.9	110.0	114.6	111.6	119.3
December	119.6	112.5	109.7	115.0	112.9	123.1
March	122.0	114.2	109.5	116.5	114.1	125.3
June	123.3	115.4	112.8	118.6	116.4	126.4

Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.8 Consumer Price Index

CONSUMER PRICE INDEXES (ALL ITEMS)
(1985 = 100.0)



Source: Organisation for Economic Cooperation and Development, Quarterly Data

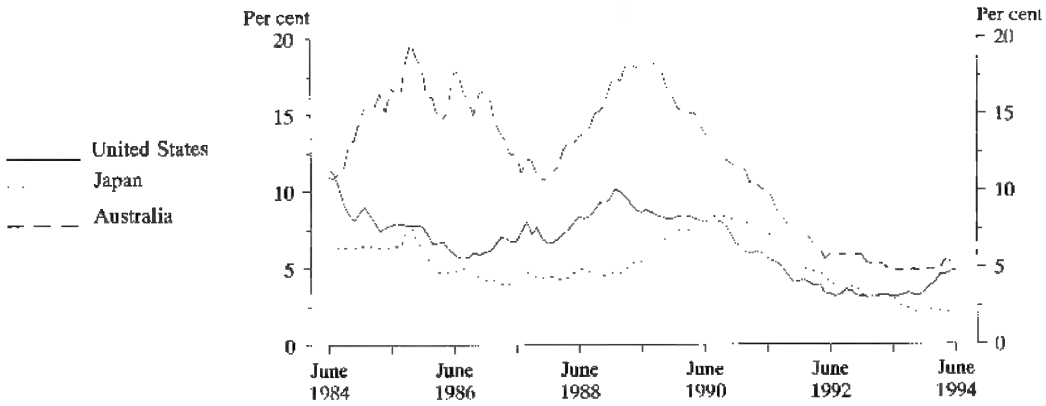
CONSUMER PRICE INDEX (ALL ITEMS)
(1985 = 100.0)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1988–89	112.7	102.4	102.7	111.1	117.4	131.4
1989–90	118.0	105.3	105.5	116.2	127.0	142.0
1990–91	124.5	108.8	108.5	122.1	138.1	149.5
1991–92	128.5	111.5	113.1	126.4	144.1	152.3
1992–93	132.5	112.9	117.6	129.9	147.6	153.8
1993–94	135.9	114.3	121.8	133.1	150.6	156.6
			QUARTERLY			
1992–93—						
December	131.9	112.8	116.5	129.4	147.6	153.2
March	133.0	112.8	118.6	130.3	146.6	154.6
June	134.1	113.8	119.7	131.4	149.0	155.1
1993–94—						
September	134.6	114.3	120.2	132.0	149.4	155.9
December	135.5	114.0	120.9	132.6	149.9	156.1
March	136.4	114.1	122.5	133.4	150.1	156.7
June	137.2	114.6	123.4	134.3	152.8	157.8

Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.9 Short-term Interest Rates

SHORT-TERM INTEREST RATES
(per cent per annum)



Source: Organisation for Economic Cooperation and Development, Monthly Data

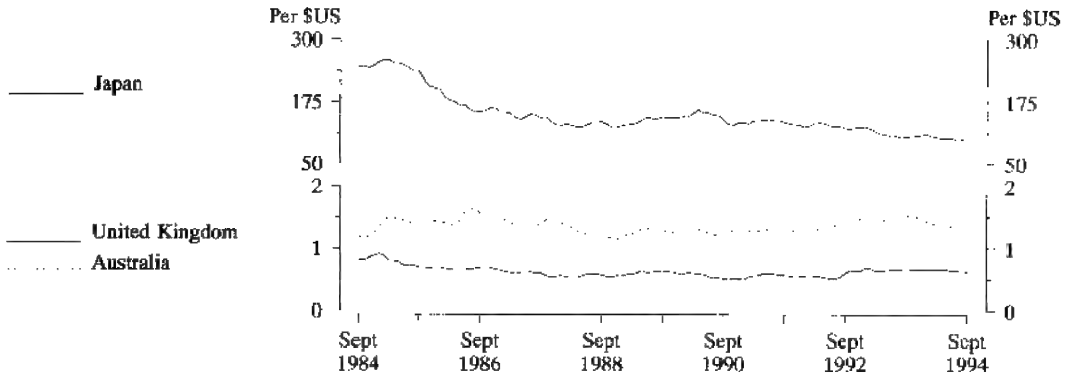
SHORT-TERM INTEREST RATES
(per cent per annum) (a)

Period	*United States*	*Japan*	*Germany (b)*	*United Kingdom*	*Australia*
		ANNUAL			
1988–89	9.20	5.29	7.02	14.15	18.30
1989–90	8.23	7.39	8.30	14.97	15.10
1990–91	6.07	7.77	9.06	11.24	10.50
1991–92	3.86	4.66	9.75	9.98	6.40
1992–93	3.21	3.23	7.60	5.89	5.25
1993–94	4.52	2.11	5.07	5.13	5.45
		MONTHLY			
1992–93—					
April	3.21	3.23	7.60	5.89	5.25
May	3.16	3.23	7.24	5.95	4.95
June	3.14	3.08	6.61	5.84	4.75
1993–94—					
July	3.12	2.63	6.63	5.91	4.85
August	3.24	2.45	6.64	5.76	4.80
September	3.35	2.33	6.31	5.57	4.80
October	3.26	2.08	6.11	5.33	4.85
November	3.15	2.14	5.89	5.39	4.80
December	3.43	2.09	5.91	5.22	4.80
January	3.77	2.27	5.84	5.16	4.95
February	4.01	2.26	5.59	5.21	4.85
March	4.51	2.18	5.20	5.17	4.85
April	4.52	2.11	5.07	5.13	5.45
May	4.73	2.14	4.97	5.20	5.40
June	4.81	2.27	5.00	5.53	n.y.a.

(a) All rates are the 3-month treasury bills rate except Japan (3-month 'gensaki' rate), Germany (3-month loans rate) and Australia (90-day commercial bill rate). (b) Monetary, economic and social union between the Federal Republic and German Democratic Republic took place on 1 July 1990.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.10 Exchange Rates

SELECTED EXCHANGE RATES
CURRENCY PER $US



Source: Organisation for Economic Cooperation and Development, Monthly Data

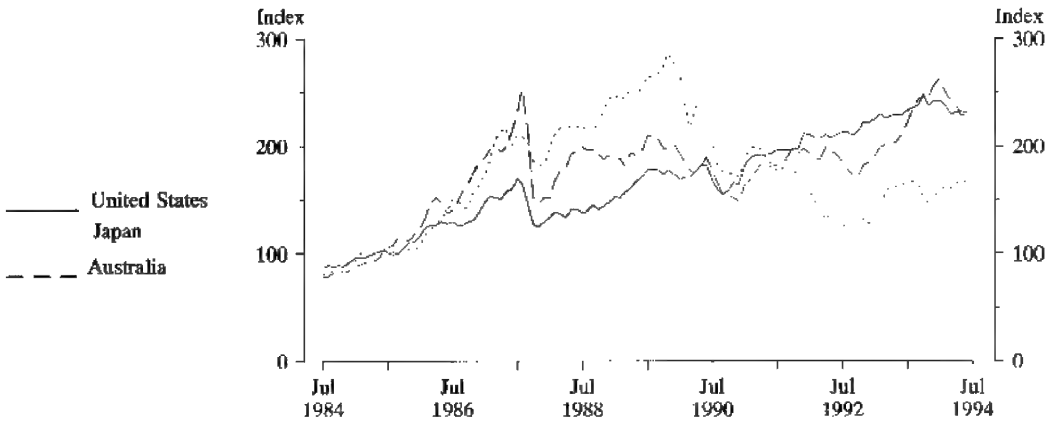
EXCHANGE RATES - CURRENCY PER US DOLLAR (a)

Period	*Japan (Yen)*	*Germany (DM) (b)*	*United Kingdom (Pound)*	*Australia (Dollar)*	*New Zealand (Dollar)*
		ANNUAL			
1988–89	143.91	1.98	0.64	1.32	1.74
1989–90	153.76	1.68	0.59	1.28	1.72
1990–91	139.80	1.78	0.61	1.32	1.73
1991–92	126.91	1.57	0.54	1.32	1.85
1992–93	107.29	1.65	0.66	1.48	1.85
1993–94	102.69	1.57	0.85	1.36	1.69
		MONTHLY			
1993–94—					
July	107.77	1.72	0.67	1.48	1.82
August	103.72	1.70	0.67	1.48	1.81
September	105.25	1.62	0.66	1.54	1.82
October	106.94	1.64	0.67	1.51	1.81
November	107.85	1.70	0.68	1.51	1.83
December	109.69	1.71	0.67	1.49	1.80
January	111.54	1.74	0.67	1.44	1.78
February	106.16	1.74	0.68	1.40	1.74
March	105.12	1.69	0.67	1.41	1.75
April	103.48	1.70	0.67	1.39	1.76
May	104.00	1.66	0.67	1.38	1.71
June	102.69	1.63	0.66	1.36	1.69
1994–95—					
July	98.54	1.57	0.65	1.37	1.67
August	99.86	1.57	0.65	1.36	1.66
September	98.79	1.55	0.64	1.35	1.66

(a) Monetary, economic and social union between the Federal Republic and the German Democratic Republic took place on 1 July, 1990.
(b) Monthly data are daily averages of spot rates quoted for the US dollar on national markets.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

3.11 Share Price Index

SHARE PRICE INDEXES
(1985 = 100.0)



Source: Organisation for Economic Cooperation and Development, Monthly Data

SHARE PRICE INDEXES (a)
(1985 = 100)

Period	*United States (b)*	*Japan*	*Germany (b) (c)*	*United Kingdom (d)*	*Australia (b)*
			ANNUAL		
1988–89	178	248	136	177	191
1989–90	203	239	174	186	181
1990–91	217	190	154	192	179
1991–92	232	130	152	205	195
1992–93	248	162	135	222	204
1993–94	232	169	170	234	229
			MONTHLY		
1992–93—					
June	229	162	135	222	204
1993–94—					
July	229	163	143	220	210
August	233	167	150	233	222
September	236	167	149	235	233
October	238	165	155	239	244
November	248	153	159	237	246
December	238	145	166	250	245
January	242	152	172	263	257
February	242	160	171	263	262
March	238	162	173	252	251
April	230	161	179	247	242
May	231	165	181	244	238
June	232	169	170	234	229
1994–95					
July	231	166	169	237	228
August	n.y.a.	165	176	250	n.y.a.

(a) Industrial share prices for Germany, the United Kingdom and Australia. For the United States and Japan, data refer to all shares. (b) Monthly data are daily averages. (c) Monetary, economic and social union between the Federal Republic and the German Democratic Republic took place on 1 July 1990. (d) 500 share index.
Sources: Organisation for Economic Cooperation and Development (OECD) and *Australian Bureau of Statistics* (ABS).

Chapter

CHAPTER 4
STATISTICS: CONCEPTS, SOURCES, METHODS AND USAGE

To assist your understanding of the statistics presented in Chapters 2 and 3, some of the more important or regularly occurring statistical concepts, sources, methods and usage are explained in this chapter. However, the explanations provided here are very brief, so if you require a detailed understanding of a topic, you must be prepared to undertake further research.

The ABS has a range of publications that discuss the following issues in detail. Some of these are included in the Further Reading reference at the end of this chapter. In addition, the publications listed as sources in Chapter 2 contain information on concepts, sources and methods of the statistics they relate to and, in some cases, provide reference to publications which explain the issues in further detail.

STATISTICAL CONCEPTS AND METHODS

Time Series

A data set is a collection of observations relating to a variable or group of variables. For example, a set of data could consist of observations of the population for each State and Territory in Australia at a single point in time, say census night 1991. This provides a snapshot view of the population of Australia which could be used to compare populations of the various States and Territories in terms of age, sex, etc.

A time series is a list of observations for the same variable or group of variables over a period of time. For example, a time series could consist of the population for Australia for each year from 1980 to 1990. Time series enable recent estimates to be placed in a meaningful historical perspective, which permits analysts to see if the current situation is improving, deteriorating or staying much the same.

Classifications

Classification is the grouping of data into classes or categories according to various characteristics. For example, retail businesses may be classified according to what they sell. Instead of just compiling data about 'retailers', data could be compiled separately for footwear stores, butchers, newsagents, etc.

The ABS has defined standard classifications that are used to present a wide range of data. Some examples of these are:

- Australian and New Zealand Standard Industrial Classification (ANZSIC);
- Australian Standard Geographical Classification (ASGC);
- Australian Standard Commodity Classification (ASCC);
- Standard Institutional Sector Classification of Australia (SISCA).

Classifications have a standard framework which enables clear scope (boundaries) for the collection and compilation of data. This makes it possible to compare and analyse data from different surveys over a period of time.

ABS classifications align closely with international classifications enabling comparability with international statistics. A wide variety of organisations (government, private sector, educational institutions, etc.) use the ABS classifications for a variety of purposes including the analysis of data and running their own surveys and censuses. This enables them to compare their data with data from the ABS and from other organisations which use the same standard classifications.

Constant Price Estimates

Constant price estimates provide a convenient way of measuring *real* change in various economic statistics, that is, the growth after adjusting values to remove the direct effects of price changes.

Many economic statistics, such as gross domestic product, relate to a wide range of goods and services. Our difficulty is how to aggregate different units of measurement, e.g. the number of cars produced with tonnes of steel produced. If we use a common unit of measurement, i.e. money values (or dollars), we can express transactions for a range of goods and services as a single aggregate.

However, change in money values from one period to another is generally a combination of change in price and a change in quantity. In most cases, we are interested in changes in the physical quantities underlying the dollar values, e.g. the change in the number of cars produced. As a result, estimates are adjusted to remove the direct effects of price changes. Such estimates are said to be *at constant prices* (or in real terms).

The current price value of a transaction may be thought of as being the product of a price and a quantity. The value of a transaction at constant prices can be derived by substituting, for each current price, the corresponding price in the chosen base year.

It is not possible to derive constant price estimates for items such as interest rates or profits, that do not have price and quantity components. Nevertheless, such items can be expressed in real terms by deflation using a price index in order to measure changes in the purchasing power of the item.

This involves dividing the current price values by a broad indicator of price change such as the CPI or the implicit price deflator of GDP. The underlying assumption is that these price indexes are representative of price change of the goods and services that could be purchased with the money earned from profits, interest, etc.

Base Year Selection

Most developed countries have chosen to rebase their constant price estimates either every 5 or 10 years. The ABS has chosen to rebase its estimates every 5 years. The current base year is 1989–90.

Indexes

An index number measures the value of a variable in relation to its value at a base period. The essential idea of index numbers is to give a picture of changes in a variable much like that drawn by saying 'the price of petrol rose 5 per cent from June 1992 to December 1993'. Index numbers measure change without giving the actual numerical value of the variable. Change is measured from a base period which is expressed as 100.0.

$$\text{The index number} = \frac{\text{current value}}{\text{base value}} \times 100.$$

Because indexes summarise change, they are useful in economic analysis.

Movements in index numbers from one period to another can be expressed either as percentage changes or as changes in index points. It is important not to confuse the two methods because unless the comparison is with the base period, the two yield different results.

Seasonal Factors

Some data are influenced by the nature of the period to which they relate. For example, sales of sunblock are higher for January than for July. Normal seasonal influences on data are those effects that recur regularly one or more times a year. Data that are seasonal may reflect the influence of the seasons themselves (such as farm production) or social convention (such as the incidence of holidays) or economic factors (e.g. timing of tax payments and financial year timing). Some data reflect differences in the composition of the months or quarters in terms of the number of trading days in the period or accounting practices used.

This feature of the data can make interpreting monthly, quarterly and yearly changes difficult and so the ABS uses a special statistical tool called *seasonal adjustment* to standardise the data. Seasonally adjusted data has had all the calendar-related influences removed.

Seasonally adjusted data still contains the effects of irregular influences on the data. For example, sales of beer may have been affected by some large, one-off event such as a strike in several large breweries. Seasonal analysis does not remove such effects but the ABS is able to significantly dampen such irregular influences in seasonally adjusted series by producing a *smoothed seasonally adjusted* or *trend* estimate.

Trend Estimates

The smoothing or trending procedure used by the ABS is based on a set of moving averages known as Henderson filters. These moving averages dampen the irregularity of data without distorting the timing, level or shape of turning points i.e. peaks and troughs. Trend estimates provide a simple yet very effective measure of the underlying growth or decline of a time series. They also provide a much wider basis for analysis than the more erratic seasonally adjusted or original data.

National Accounts

With separate indicators, particular aspects of economic activity can be monitored. Another important use of this information is as the building

blocks of a set of accounts for Australia, called the national accounts. Just as a set of accounts for a business consolidate a lot of information about the business and present it in a set format, national accounts consolidate a range of statistics, from those involving individuals to those involving the whole nation, into a consistent format which describes the overall economic position of the nation.

The concept of national accounting is quite old, having been developed as far back as the 17th century. However its current look is relatively new, with welfare economists led by Pigou in the 1920s producing the first effective modern measurement of national income. A fundamental re-direction of emphasis in economic analysis and policy occurred after the acceptance and adoption of principles set down in John Maynard Keynes' 1936 publication *The General Theory of Employment, Interest and Money*.

As a result, national accounting has developed as an integral part of economic analysis and policy advising. Government interest focused on production and the allocation of resources to competing uses. Macro-economic policy, concerned with the maintenance of income, price and employment stability, was dependent for much of its effectiveness on timely and accurate information on the components of domestic production. To provide conceptually consistent information and to illustrate the relationships between the components, estimates were gathered into a system of national accounts.

Australia's national accounts are compiled in a manner which closely accords with the recommendations of the United Nations *A System of National Accounts* (SNA), which was published in 1968. Further work on the development of national accounting standards to reflect changing economic and policy requirements since 1968 has culminated in the endorsement of a Draft Revised SNA by the UN Statistical Commission in February 1993. The revised SNA is expected to provide a framework for national account statistics into the 21st century.

At the summary level, the national accounts are designed to reflect the economic flows of the Keynesian system: production, consumption, investment and saving. The relationship which Keynes elaborated (that production is equal to the value of incomes received and in turn equal to the value of final expenditures) is summarised in the equation:

$$Y = C + I + X - M$$

In this equation, Y represents income, C represents consumption, I represents investment, X is exports, and M is imports. The relationship between Keynes' work and national accounts becomes apparent when the domestic production account from Australia's national accounts is examined.

On the **income side** of the account are the incomes accruing to the factors of production: wages, salaries and supplements earned by labour, operating surplus (profits) earned by capital and net indirect taxes accruing to government. On the **expenditure side** of the account are final consumption expenditure, investment (represented by gross fixed capital expenditure and increase in stocks), plus the value of Australia's exports (which are

part of Australia's total production) minus the value of imports (which represent part of the production of other nations).

The various terms from the equation Y= C + I + X - M are grouped into four major accounts in Australia's national accounts. The *domestic production account* summarises domestic production, income and expenditure. Consumption is examined in more detail in the *national income and outlay account*, saving and investment in the *national capital account* and exports and imports in the *overseas transactions account.*

National accounts estimates attempt to account for every monetary transaction of every economic agent in the economy, as well as imputing a value for a range of transactions that do not involve the exchange of money (for example, when producers consume their own products). The quality of national accounts statistics depends to a large degree on the quality of the original records maintained by businesses, governments and other institutions from which data are obtained.

INTERPRETING STATISTICS

Definitions

It is important that your understanding of relevant terms correspond to the ABS definitions. This ensures that interpretation of terms is uniform and the information is used in the right context. For example, how do you define 'unemployment'? Compare your definition with the ABS definition. Most ABS publications contain definitions of the information they include.

Footnotes

Footnotes are used to add comments and/or explanations to the tables or graphs. Footnotes are indicated by the inclusion of a letter in brackets e.g. (a), (b), (c), etc. beside the figure or heading which requires explanation. This letter and its footnote are presented under the table or chart.

The position of the footnote reference is important in the table or graph. If the footnote reference is in the title of the table or graph, then the message in the footnote relates to the whole table or graph. If it appears next to a column heading, then the message in the footnote applies to the data within that column. When analysing statistics, it is important to give attention to the footnotes as they often point out limitations in the data which could significantly affect interpretation.

Explanatory Notes

Explanatory notes are designed to assist the user in understanding the data in the publication. They provide information on the data collected and the method of collection and are useful in highlighting the limitations of the data. For example, explanatory notes generally include descriptions of the methodology and scope used to collect the data, data definitions, reliability of estimates, seasonal adjustment and comparability with other data.

Averages

An average (arithmetic mean) provides a useful summary measure of the contents of a set of data. However, averages can give a very deceptive picture of the meaning of statistics if they are misunderstood or misused. The average is affected by extremes in data (highest and lowest values) and unequal distributions. It may be beneficial in analysis to also examine the mode

(most frequently occurring value) and the median (the value in the middle of an ordered data set) as a guide to the characteristics of the data.

Composition of Totals

Analysis of totals will give you an idea of overall trends in time series data. To gain a more complete understanding of the data, however, an analysis of the components making up the totals is necessary. For example, there were more women than men in Australia at the 1986 census. However, further analysis shows men outnumbered women in each age group up to the 50 to 59 years age group, but women outnumbered men greatly in the older age groups.

Graphs

Graphs are an excellent way of presenting data. They enable the user to get a feel for the data quicker than using tables or from text.

Graphs, however, can very easily be misleading and care should be taken in interpretation. Care must be taken to understand what the title and axis headings mean and what data series are actually represented in the graph. Attention must be paid to the units (e.g. millions of dollars, persons) and the scales used.

Surveys and Censuses

Ideally, if we want to find out something about a group of people or businesses, we would approach every person or business in the group (called the population). This is called a census. The best known census is the Census of Population and Housing, which collects information from every household in Australia. However, by sticking to certain rules, a reliable picture of a population can be drawn from a selection or a sample of that population. The key lies in selecting a sample that is representative of the whole population.

An advantage of sample surveys over censuses is that they are cheaper and are easier to run. However, one main disadvantage is that the results contain *sampling error*, which is the difference in the results obtained by using a sample of the population rather than the whole population. In some instances this error can be quite large. Where information is being analysed from sample surveys, the size of this error should be taken into account when assessing the credibility of results. Sample survey and census results can also contain *non-sampling error*, which is error resulting from collection and processing errors e.g. respondents being unable to accurately recall information or mistakes made in recording or coding.

STEPS IN ANALYSIS

Although there are no hard and fast rules to the correct approach, the following steps may give you a starting point for analysing time series data.

(a) Determine what data are available and relevant to your topic. The ABS *Catalogue of Publications and Products* (1101.0) is a good place to start.

(b) Look at the layout of the table in order to understand how the data are arranged. Check the row and column names to obtain a clear idea of the variables being displayed.

(c) Scan the totals in the tables for an overall idea of the trends in the data. A graph is often the most appropriate tool for this analysis. If no graph is presented, consider graphing the data yourself to get a clear picture.

(d) If the data are available by different frequencies (e.g. annually, monthly), decide which of the available frequencies is most appropriate for your purpose. Annual data may be appropriate for examining data over a long time; quarterly or monthly data may provide a better picture of more recent developments.

(e) Make sure you have a clear idea of the questions for which you seek answers in the data. For example:

- are the values of the variable rising or falling over time?
- when was the last peak (high point) or trough (low point)?
- has the rate of change risen or fallen over time?
- have the shares of components in the total changed over time?

It is important to conduct your analysis one logical step at a time. Do not try to take all the information in at once and try not to get side-tracked with minor issues as you do your analysis.

Further Reading

☐ *An Introduction to Sample Surveys — A User's Guide* (1202.2)
Contains a basic guide to the use of sample surveys. Topics covered include survey objectives, data collection methods, questionnaire and sample design, sources of error, survey testing, data collection and processing and analysis and presentation of results.

☐ *Concepts and Methods of Seasonal Analysis* (1315.0)
Provides coverage of the theory underlying seasonal adjustment and the methods used by the ABS. Includes guidance for the interpretation of seasonally adjusted data.

☐ *Surviving Statistics — A User's Guide to the Basics* (1332.0)
A comprehensive basic guide to understanding and using statistics.

☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
Contains the history, conceptual framework and structure of the national accounts, including an explanation of constant price estimates.

☐ *Statistics - A Powerful Edge!* (1331.0)
A comprehensive guide to understanding statistics - designed for the reader to gain confidence in using statistical information.

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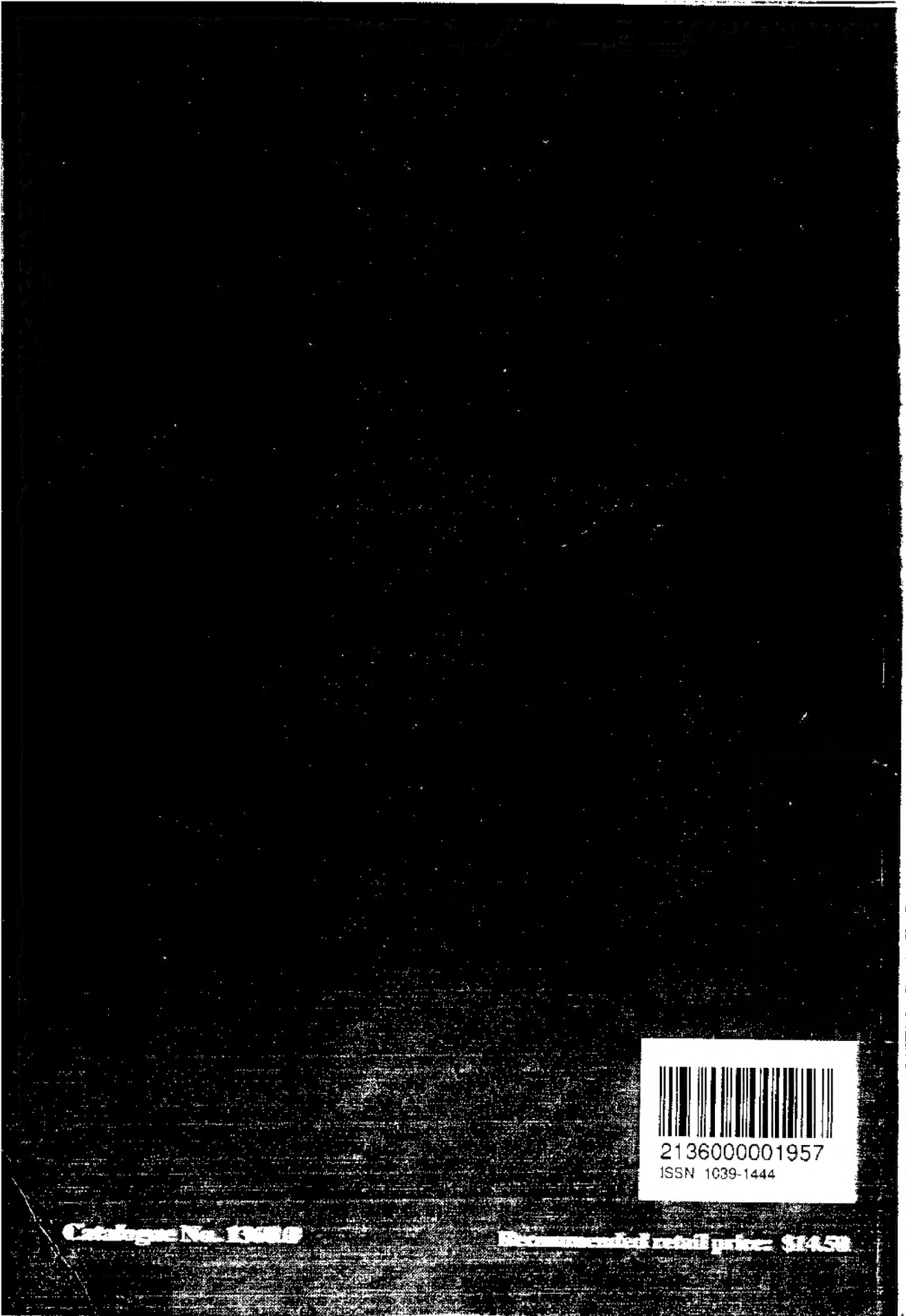
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